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SUPERBAD SPAD

KAMIL FELIKS SZTARBALA'S VIETNAM SKYRAIDER



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TRUMPETER'S 1:32

SDB3 DAUNTLESS

Modelled and described by Tomas de la Fuente



Midway's Champion

In 1934, the Douglas Company designer, Ed Heinemann began work on a new dive bomber for the U.S. Navy, which was to be based on aircraft carriers. After many twists and intermediate type designs, finally on 23 July 1938, the first flight of the prototype of the Dauntless, the XBT-2 took place. The first production model was shipped on June 4, 1940, the SBD-1. Over the next four years, there were several models Dauntless (SBD-1, -2, -3, -4, -5 and -6), besides being used by the U.S. Navy, other countries, (Australia, Chile, France, Mexico, New Zealand and the UK), and the U.S. Army also used it, under the name of A-24 Banshee.

At the beginning of hostilities against Japan, the Dauntless proved itself including in the Battle of the Coral Sea, the Battle of Midway and Guadalcanal. And specifically in Midway where they won great respect, being the principal architects of victory, because in four minutes they sank three of four Japanese aircraft carriers. The fourth aircraft carrier, was sunk a little later.

In particular the model SBD-3 performed well at Midway and were the same aircraft that had participated in the Coral Sea a month earlier, well worn aircraft, and experienced in combat, these are aspects that must be reflected in the realisation of the model I had planned.

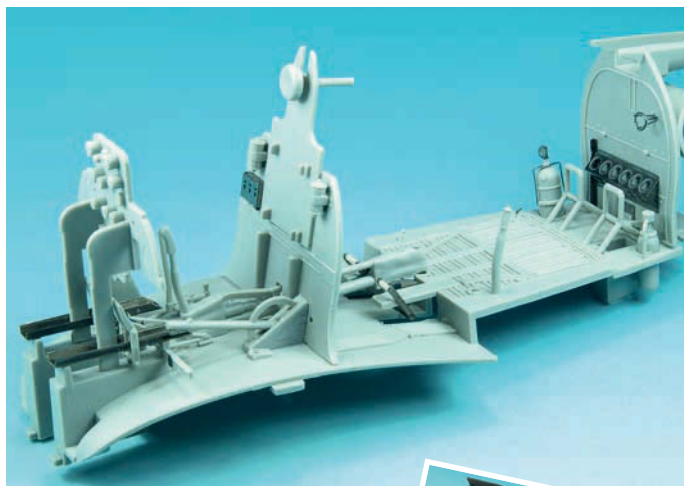
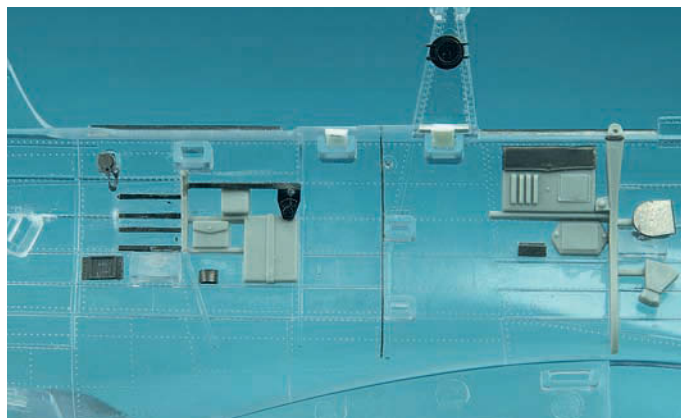
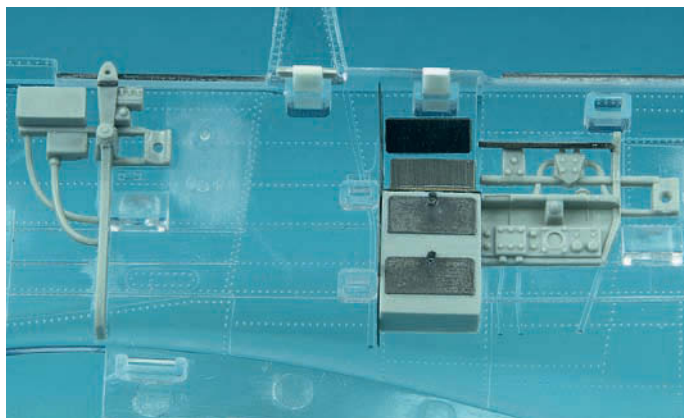


The Trumpeter kit in 1:32 scale, was my choice for the project, and the version I bought, is specific to the SBD-3 at Midway. When I opened the box I wasn't happy, as the fuselage was moulded in clear plastic. I particularly detest clear plastic, as it is very brittle and difficult to machine and not sanded easily. The rest of the model looked good, with many parts, as is tradition with this brand there's an option of two versions of the same model, early and late, distinguished, besides the tail gunner weapon, in the

fairing behind the engine. To bring the detail to the standard I wanted I thought it necessary to acquire several improvements, which were:

The Eduard Big Ed set dedicated to this aircraft, which is a bumper set with all the Eduard photoetch and masks, Master Casters resin wheels, Master's metal Gun Barrels and Aires resin .50 M2 Machine Gun (Browning). In total I used around 400 pieces of photoetch, really crazy!





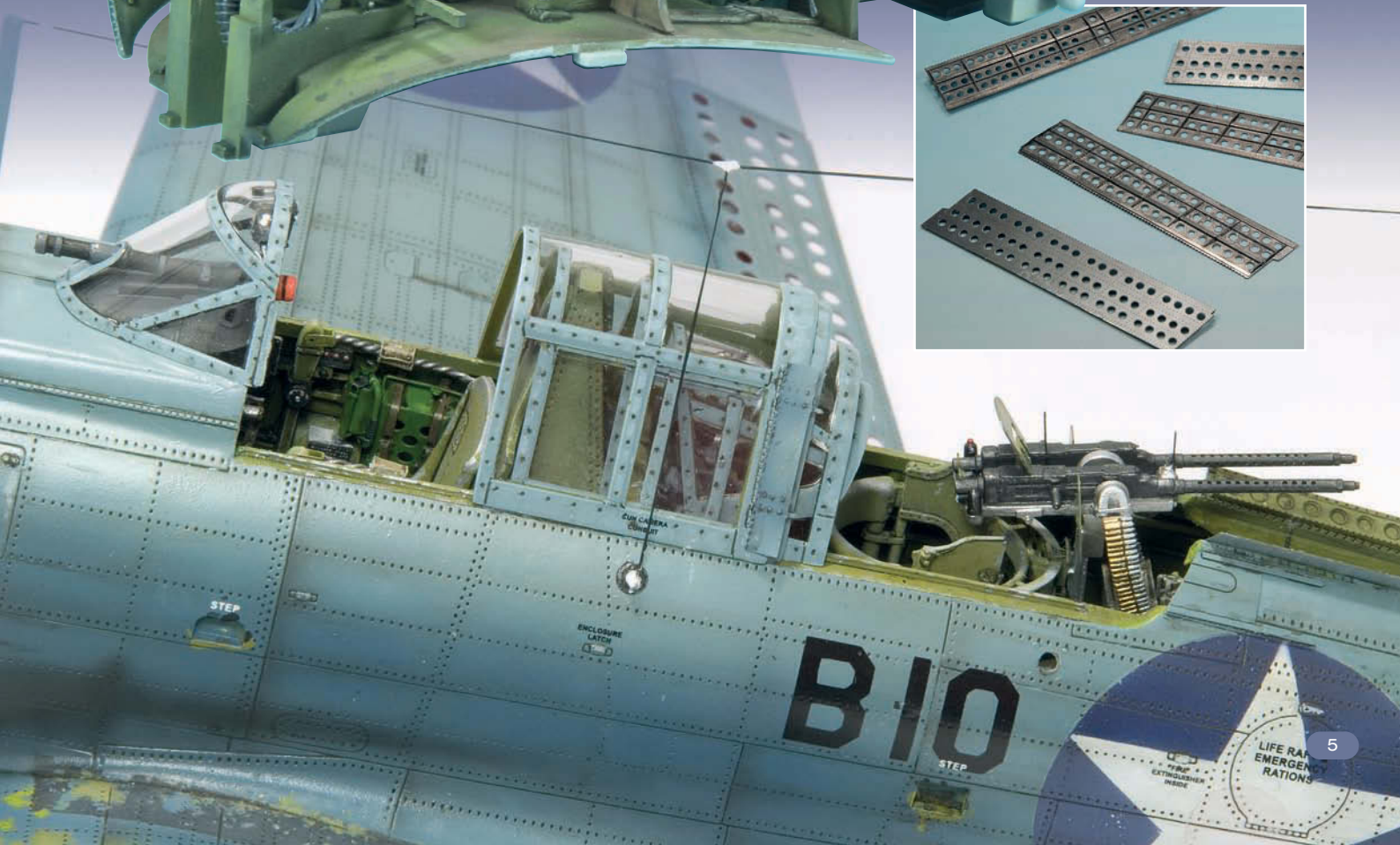
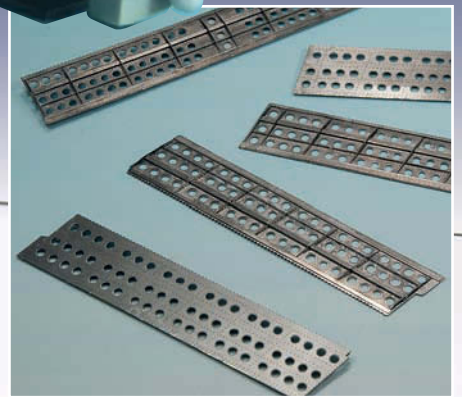
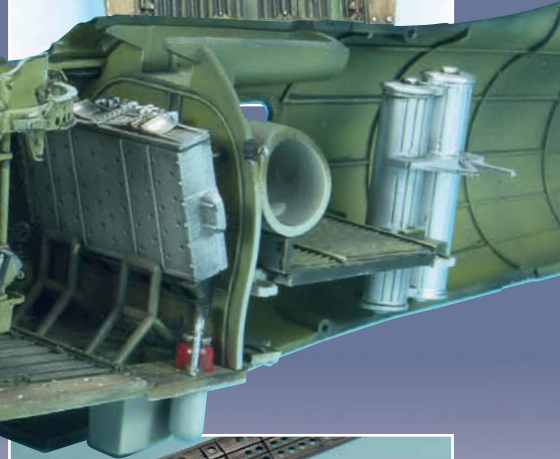
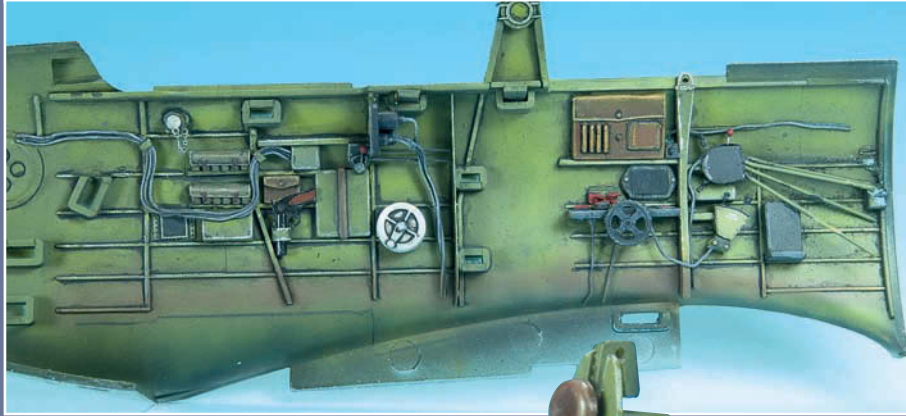
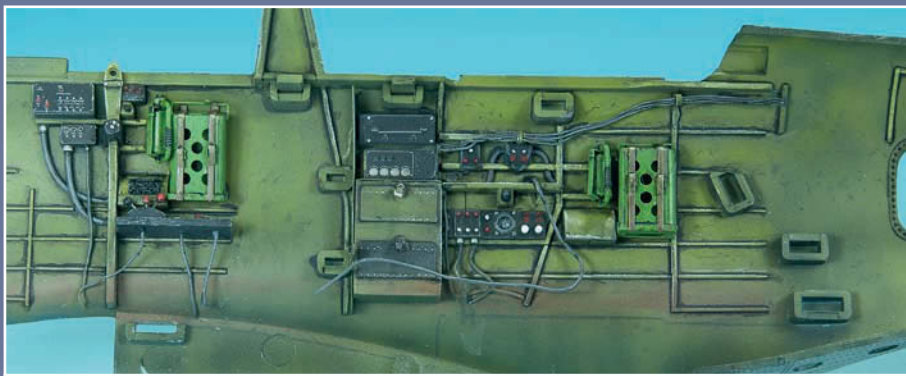
Construction

I started assembling some pieces sticking photoetched parts in the fuselage and other details and I could see that the transparency of the plastic would be a real problem, I decided to prime all interior parts in black, which gave me a great contrast to work on. After all the interior was painted with Gunze Interior Green, H-58, some parts like the seat and the tail gunner position which were first painted with Alclad II Aluminium Dull (ALC-117), were scratched with a scourer around the edges before the green dried simulating the wear often seen. The ammo box in the tail gunner position is in aluminium, and Model Master metalizer was used for this.



Once I'd painted the entire interior, I proceeded to apply some airbrushed highlights, the same colour mixed with a few drops of yellow. After that all photoetched parts were added: plates, instrument panels, seat belts, front of radio equipment, etc. I also added the necessary wiring, making wire and cable from Plus Model's lead wire which allows for easy shaping. There are several placards that don't come in photoetch, but I thought they were important so these were drawn in Photoshop by my good friend Antonio Ramil. The placards were printed in reverse on clear acetate, and then coloured behind in the necessary tones. I painted the details with Vallejo acrylics, and the baskets that carried the oxygen systems and regulators I painted in a different shade of green, specifically Mr Color Russian green C-135, to differentiate as per my references. After all this, I added shading, applying a wash of Mig Productions Dark Wash giving a very convincing finish. Once this is finished, I let it dry for a day and matt varnished with polyurethane acrylic matt varnish from Vallejo, which gives a very good matt finish. Also applied were earthy tones with Mig pigments on the edges of the floor to give the illusion of dust and dirt inside the cabin.

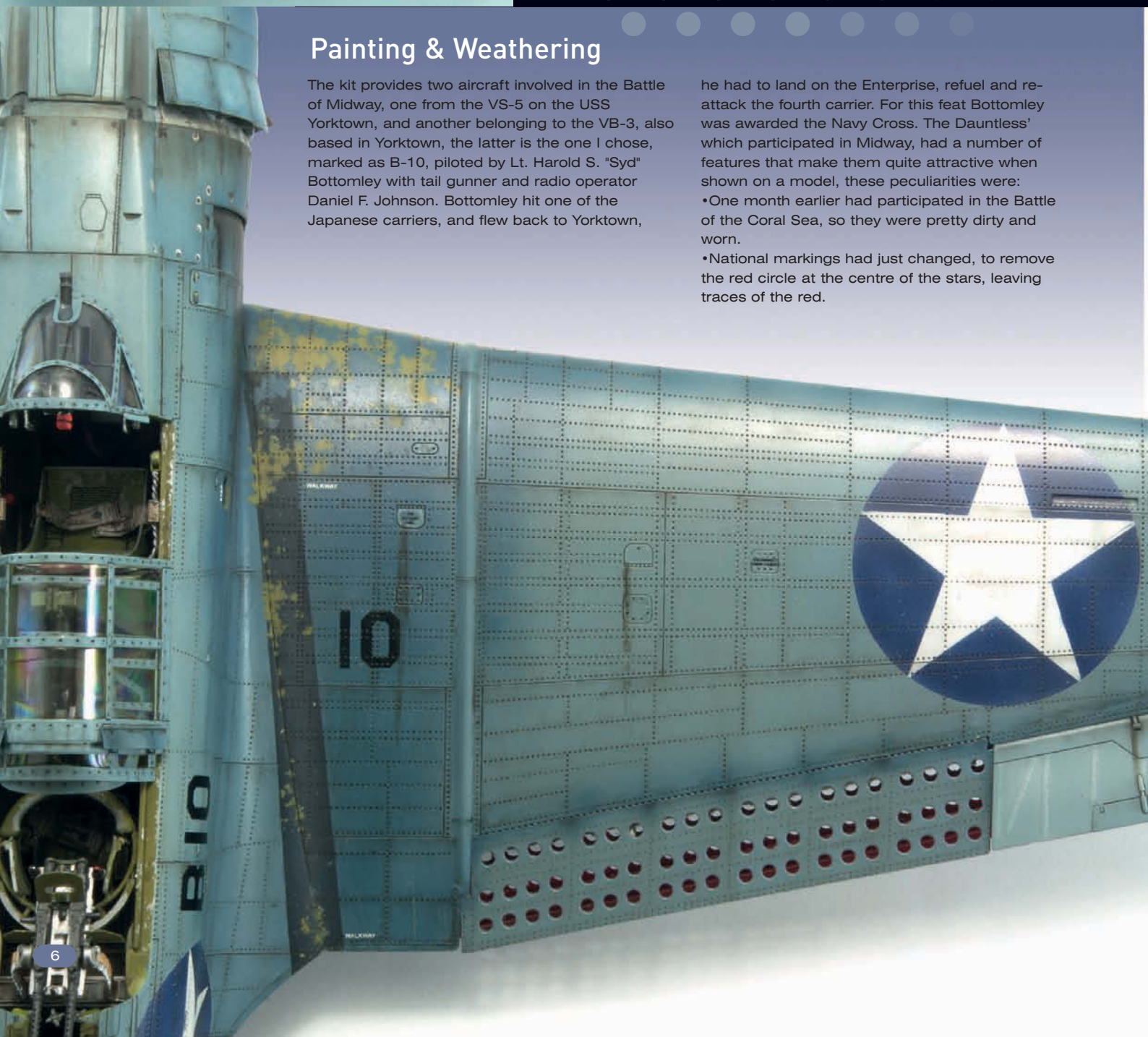






While I was working with the cockpit, I was working in parallel on the engine adding the photoetch and the spark plug wires with again, Plus Model wire. In total, between the parts of the kit itself, photoetched and cables, the engine consists of nearly a hundred pieces. I painted the engine as follows: crank case I painted with Alclad II steel, the cylinder base with Alclad II Magnesium (ALC-211), the cylinder head with Alclad II aluminium and the starter ring, the gearbox in grey Gunze H-22. The valve caps on the cylinder head and the plates covering the heads were finished with black enamel (XF-1 Tamiya), the intake pipes with Alclad Pale Burnt Metal (ALC-104), the spark plug wires with X-9 Tamiya enamel. Leaks and weathering were achieved with various shades of brown with matte acrylics and Mig pigments and rust tones.

Once the engine and cockpit were done, before closing the fuselage, I cut the doors of the compartment that housed the rear guns, a rather delicate operation given the fragile nature of transparent plastic. To make the cut, I use Dymo tape, to support the area and a pin in a chuck to scribe through the plastic until it is free. Then, I could glue the two fuselage halves. I primed it by airbrushing Mr Surfacer diluted with Lacquer Thinner, after which there were some defects in the plastic which I fixed with putty. I Glued the wings together, before adding a series of pieces in photoetch to the wheel wells, and glued the wings to the fuselage, and the elevators, leaving the model ready for the painting phase.



Painting & Weathering

The kit provides two aircraft involved in the Battle of Midway, one from the VS-5 on the USS Yorktown, and another belonging to the VB-3, also based in Yorktown, the latter is the one I chose, marked as B-10, piloted by Lt. Harold S. "Syd" Bottomley with tail gunner and radio operator Daniel F. Johnson. Bottomley hit one of the Japanese carriers, and flew back to Yorktown,

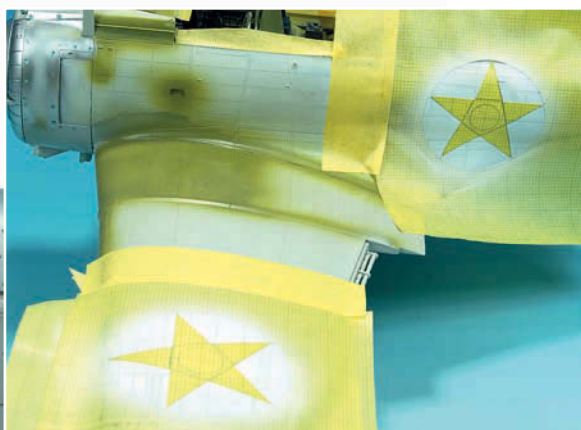
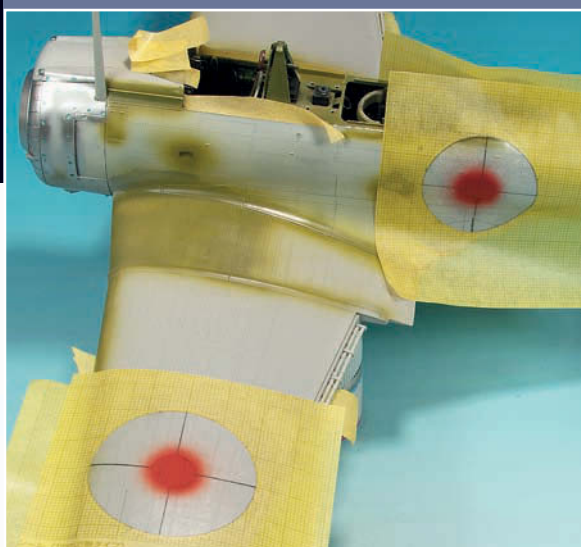
he had to land on the Enterprise, refuel and re-attack the fourth carrier. For this feat Bottomley was awarded the Navy Cross. The Dauntless' which participated in Midway, had a number of features that make them quite attractive when shown on a model, these peculiarities were:

- One month earlier had participated in the Battle of the Coral Sea, so they were pretty dirty and worn.
- National markings had just changed, to remove the red circle at the centre of the stars, leaving traces of the red.

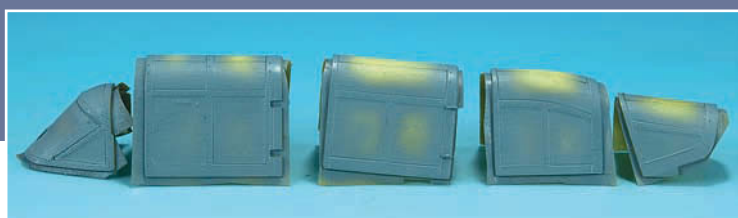
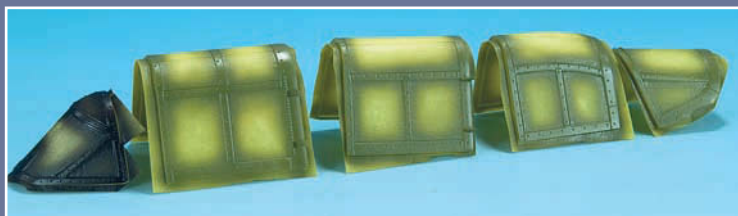
•Also removed were the red and white lines painted on the tail. On some aircraft, a patch could be seen in a darker blue or they are painted with a blue grey, but quickly bleaching you could still see the white and red lines, this was my choice.

•Despite being painted in a single tone, the grey blue, showed a significant gradation of shades of the same colour, depending on the area of the airplane, due to wear gradation and fading.

As I said, these aircraft were painted in blue grey FS 35189 over FS 26440 and grey on the undersides. To paint this I used Mr Color C-367 lacquer, which corresponds to the FS 35189 very well. For the FS-26440 grey I used the Gunze H-325, also gives the exact shade.



For the canopies, first I dipped the parts into Future / Klear and allowed them to dry on absorbent paper. This removes imperfections and provides a good smooth surface. After letting it dry for several days, I proceeded to apply the magnificent Eduard masks, then painted green inside with Gunze H-58, on all parts except the front which was painted black. Once dry, I painted the exterior color, the blue grey, finally, I outlined all screws and panel lines with pen and a dark transparent wash.

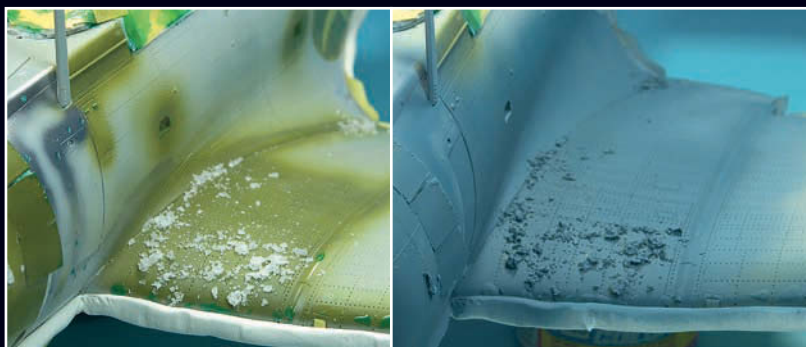


I painted the lower surfaces with Grey FS 26440, for the control surfaces I painted with the same grey, but mixed with white Gunze H-316 (an off-white, not pure) in a ratio of 1:4. With the same mix, the panels on the bottom of the fuselage were highlighted and working from references, areas were masked and painted with a mixture of 26440 FS plus one drop of H-37 (Wood brown) Gunze, to give a slight tan tone to the lower surfaces. The control surfaces were masked with thin tape on the protrusion of the ribs, and after airbrushing with a mixture of FS 26440 white mixed with H-316, in a 1:1 ratio, the rib surface is highlighted. Finally I airbrushed with the very diluted FS-26440 to add some contrasts in areas.

Before painting the upper surfaces, some areas of the fuselage were painted with interior

green, which was a primer on all naval aircraft and exposed when the blue paint was lost by abrasion and wear by the crew. This effect on the Dauntless is particularly noticeable on the wing root area closest to the fuselage. Once green areas were done, I decided first to paint the stars since the blue grey paint could darken the white tones. To paint the stars, I used some masking tape with grid pattern from Tamiya, first I started painting the red dots, which later had to be transparent. Once dry, I proceeded to apply the white, ensuring that the red was just visible, and finally using the star masks, painted the mixture of insignia blue. The result is more than satisfactory, far better than what could be achieved with decals.





I applied salt on the green where I wanted the appearance of chipped blue, this is done by first wetting the surface with a brush and then depositing the salt where required. Once the blue is applied and dried it was removed from where I wanted with a brush or toothpick.



Along with painting the stars, I painted the top of the movable surfaces and the rudder in blue, for this I mixed blue grey with off-white FS 35189 H-316, in 1:4 ratio. Once dry, I airbrushed the ribbing freehand with white H-316. I masked with thin tape and airbrushed again with a mixture of blue grey and white, this time in the ratio 1:2.

The area of the cowl behind the engine has a number of screws, in the photographs I had this appears in a bright metallic tone, a very characteristic effect also on these aircraft, I painted this with

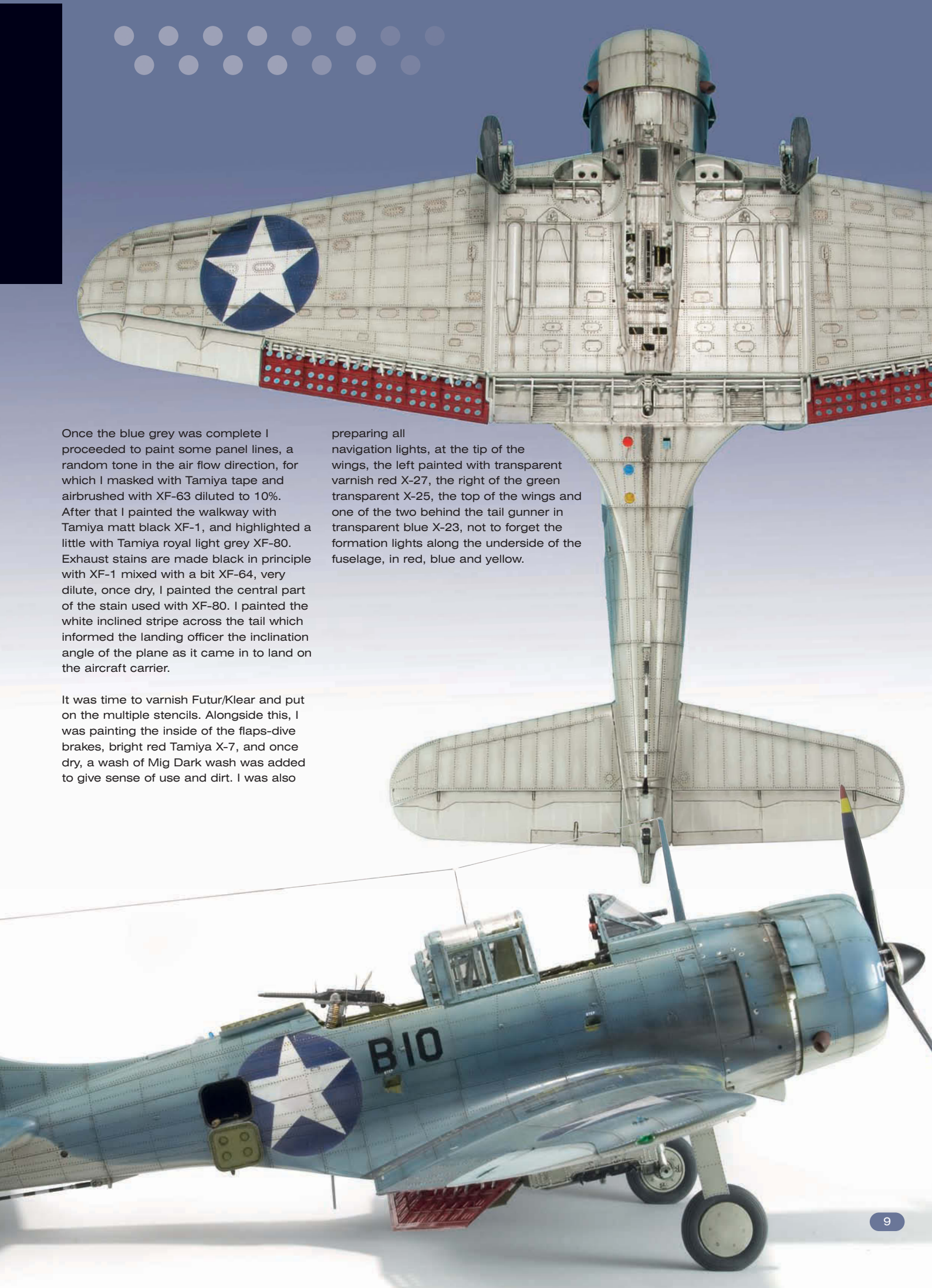
Alcald II aluminium.

As for the blue grey paint, I did many tests on plasticard sheets, and basically used three colours in gradations, the justification for using three different colours to represent a single colour is that in all sources it's seen that although the aircraft were only painted in blue grey FS 35189, this took different colour gradations depending on which area of the aircraft, ie the tip of the wings and fuselage upper the colour was very light, probably because of the intense sun of the Pacific, then there are areas on the sides of the fuselage and

in the area close to the wings, which show a very dark tone, and between them, there is an intermediate blue transition, although in some areas, the transition between light to dark tone is abrupt. For all this, I used for the lighter areas Mr Color lacquer C-367 blue grey FS 35 189, for dark areas H-42 Gunze blue grey, and intermediate areas, a mixture, (which I still had from a PBV-5A Catalina in 2004), consisting of: 60% of Medium Blue XF-18 + 30% of matt white XF-2 + 10% matte blue XF-8, all Tamiya acrylic. When painting, I chose to do the darkest colour first, then lightest and finish with the intermediate colour.



Panel lines and fixings are enhanced by Mig Productions dark washes and a fine tipped pen. Here we see the application before removing the excess with cloth moistened with thinners.



Once the blue grey was complete I proceeded to paint some panel lines, a random tone in the air flow direction, for which I masked with Tamiya tape and airbrushed with XF-63 diluted to 10%. After that I painted the walkway with Tamiya matt black XF-1, and highlighted a little with Tamiya royal light grey XF-80. Exhaust stains are made black in principle with XF-1 mixed with a bit XF-64, very dilute, once dry, I painted the central part of the stain used with XF-80. I painted the white inclined stripe across the tail which informed the landing officer the inclination angle of the plane as it came in to land on the aircraft carrier.

It was time to varnish Futur/Klear and put on the multiple stencils. Alongside this, I was painting the inside of the flaps-dive brakes, bright red Tamiya X-7, and once dry, a wash of Mig Dark wash was added to give sense of use and dirt. I was also

preparing all navigation lights, at the tip of the wings, the left painted with transparent varnish red X-27, the right of the green transparent X-25, the top of the wings and one of the two behind the tail gunner in transparent blue X-23, not to forget the formation lights along the underside of the fuselage, in red, blue and yellow.



Almost at the end, I began to apply a Mig dark wash to panel lines, all joints and seams and rivets enhancing the detail. I applied the wash with a brush and remove the excess with a clean, lint-free cloth, always moving in the direction of air flow, giving a 'patina' which removes any remaining brightness. I avoided the use of matt varnish to finish and let the satin effect remain giving a very real and convincing finish.

I finished the model gluing all remaining parts, such as bombs, rear machine guns, transparents and flaps-dive brakes, this action requiring much patience and care because of the fragile actuators that hold the brakes.

The Trumpeter model is the only one of this aircraft on the market in this scale, except for the discontinued Matchbox kit (SBD-5), but I must say that the model is not bad at all, and well worth spending some extra effort to have a Dauntless in your collection in this large scale.



I dedicate this aircraft to my wife and my children, inexhaustible sources of inspiration.

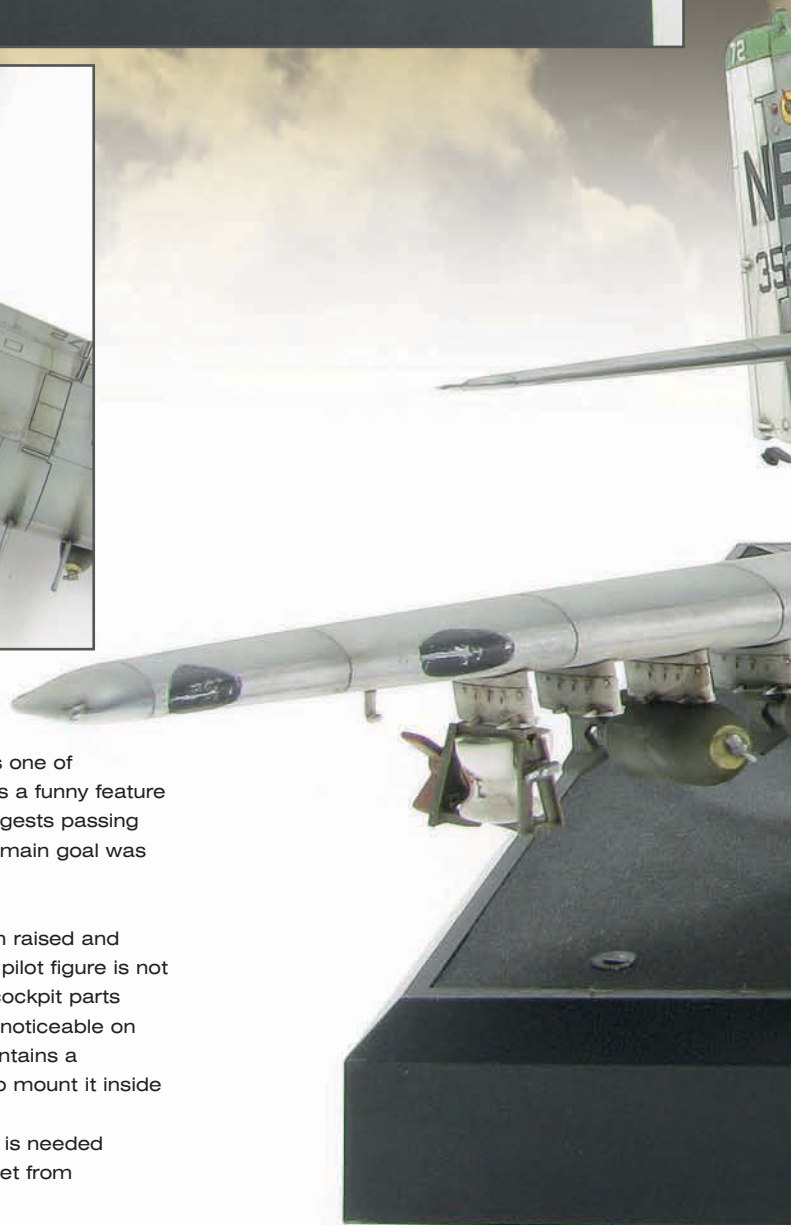




The 1:48 Skyraider kit is quite typical Tamiya release so there is no need to talk about quality of the moulding and their fit etc. We all know that Tamiya has a history of motorisation with its kits and this is one of their motorised aircraft releases. The engine powering the propeller is a funny feature of this kit, but I decided to use it nevertheless. The manufacturer suggests passing the engine power cable through a hole drilled in the fuselage, so my main goal was to try and hide the power supply in a more natural way.

The quality of mouldings is just perfect. What's more, the kit has both raised and recessed rivets, while the panel lines are of varying thicknesses. The pilot figure is not scary like those included in many other aircraft kits. Although some cockpit parts could be more detailed it's not a big issue as this area will be hardly noticeable on the finished kit with the canopy closed. This particular boxing also contains a moulded base plinth and engine together with some parts allowing to mount it inside the kit.

The decal sheets supplied with the kit contain almost everything that is needed except for the bomb markings, but I decided to use an aftermarket set from Aeromaster instead.



SUPERBAD SPAD

1:48 VIETNAM SKYRAIDER

MODELLED BY KAMIL FELIKS SZTARBALA





Assembly

My first step was to check the fit of the main parts. Fortunately, the result was promising as this had an impact on the order of further works as I wanted to alter the method of powering the engine. That required some modifications of the kit. My first idea was to drill the main gear legs and pass the power cables through them, but I found it too time-consuming. The second concept was less complicated. Catapults were often used to launch Skyraiders from aircraft carriers. Therefore, properly mounted power cables could act as the catapult bridle.

However, I had to complete the cockpit first. As it is rather tight and hardly visible after closing the fuselage halves and attaching the canopy, I didn't bother to add any details. I just glued the parts together and then airbrushed the interior with Tamiya paints. Details as well as the pilot figure were brush painted with Vallejo acrylics. To avoid troublesome masking at the later stage of work, I also sprayed the areas behind the cockpit and in front of it with grey and black paints respectively. Thanks to this only a subtle retouch was required after gluing the fuselage halves together.



Of course, the engine had to be installed earlier. Here I made the first modification. An electric device, which had to be placed under the base plinth according to the instructions, was mounted near the engine to be hidden inside the fuselage.

Once the fuselage was finished, I could deal with the wings. First, I drilled through the catapult bridle attachments hooks and glued pieces of 1 mm brass tube inside the holes. Next I soldered two pieces of wire to the ends of tubes and attached two more similar brass tubes to the wires. Pieces of brass tubes were also soldered to the ends of power cables to make connecting them easier. The wheel wells were primed with black paint and then sprayed white. Even though I usually don't apply any primers, I used it here to get



additionally enhanced shadows after doing any washes. The wing halves went together without any problems. The cables were connected, crimped and insulated.

Gluing the fuselage to the wings allowed me to focus on some smaller parts. The tractor rocket and ejector of the Stanley Yankee ejection system behind the pilot are simplified, but correcting them may be avoided by adding a distinctive fabric cover. This is visible even on the box art, however Tamiya didn't provide it. I sculpted it myself from Kneadatite Duro Green putty modelling compound. The imitation of engine is almost invisible after attaching the cowling. Therefore I just painted it with metallic colours and brought out the details by doing an acrylic wash.





External weapons

Although Tamiya's kit contains a large variety of external weapons, none of them could be found on the photos of the particular aircraft I had chosen to depict. The smaller bombs were borrowed from Italeri's 1:48 Avenger kit, while the bigger ones were scratch built using parts of Skyraider's rocket launchers and bombs from Trumpeter's 1:35 Mi-24 kit.

One of the archive photos showed that the under-belly fuel tank had a non-standard

blunt end. I cut the kit's part and sealed the hole with a piece of styrene sheet.

The work on the 'special' bomb began by roughly building up its body from Magic Sculp. Once the compound had hardened, I shaped the toilet properly with a scalpel blade and file. Styrene profiles were used to build the bomb mount. Next the bomb was given some colours and decals. Other weapons were also painted at the same time.





Paintwork

I started by pre-shading all recessed lines in black. Next I sprayed two shades of grey from the Tamiya range over the upper surfaces. It is worth noting that XF-20 Medium Grey is actually lighter than XF-66 Light Grey. Very diluted white paint was used to highlight the panels which required using a minimal air pressure. To mask the fuselage I had to employ UHU Patafix compound, Tamiya masking tape and pieces of Oramask stencil film. Then I applied a base coat of Gunze H21 off white over the undersides, ailerons, elevators and rudder. The panels on the under surfaces as well as on other areas painted white were highlighted with gloss white paint.

The top of the fin and anti-glare panel were given green and black finish respectively. Then I had to put the airbrush aside for a while and do some more masking before I could apply Mr. Metal Color Chrome Silver on the leading edges of wings and tailplane as well as on the front part of the engine cowlings.

The paintwork was protected with a layer of clear gloss varnish and it was time for the decals. A bad time, as it turned out! The Kit's decals were thick like a slice of ham and I had to retouch the borders of stars with a fine brush because they were misaligned. On the other hand, the decals from Aeromaster, although printed by Cartograf, were reluctant to conform to the irregularities of the kit's surface despite using Microscale decal solutions.

Another layer of clear gloss coat worked as a base for the wash. A quite dense mixture of Van Dyke Brown oil paint and lighter fluid was applied to the kit with a flat brush and soon rubbed off with a paper towel. I chose the lighter fluid because when it is used as the medium, the wash is more strongly absorbed into the surface than when using white spirit. Therefore, that way I didn't only darken the recesses and bring out the details, but also initially dirtied the surfaces.

The first stage of weathering was done with oils. I was applying Van Dyke Brown with a fine brush and rubbing it with flat brushes, either dry or slightly dampened with White Spirit. Next I took Smoke and Oil acrylics from Lifecolor's Tensocrom range and painted some streaks and stains. Then I switched to pigments from MIG Productions. Black Smoke and Vietnam Earth were used to imitate the exhaust stains, while the dirt on the wings was done with other earth colours.



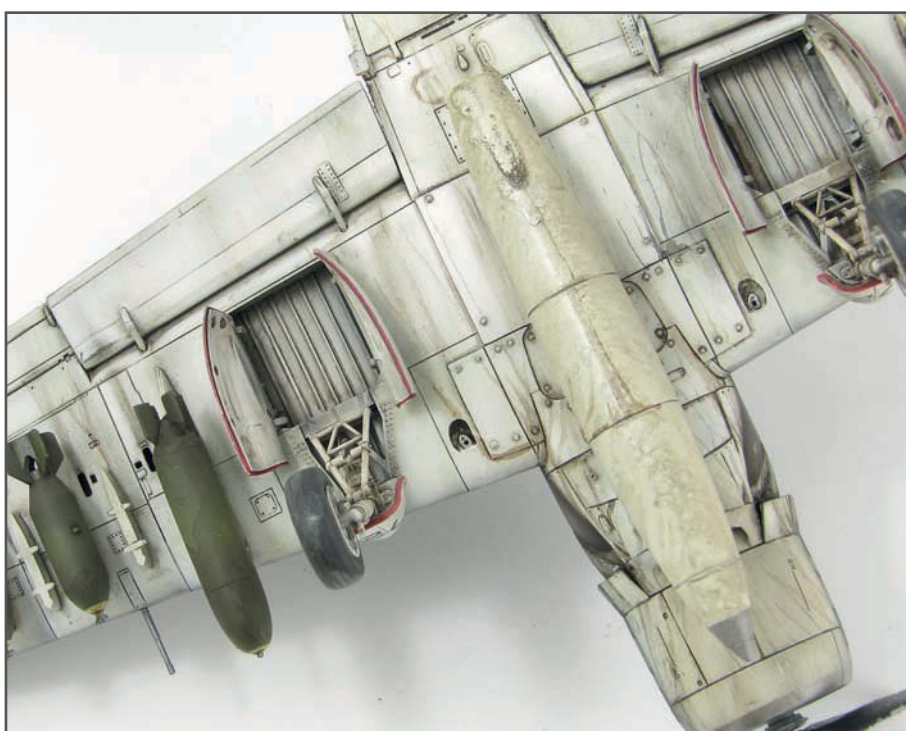




The stand

As I had already reworked the power cable arrangement inside the kit, now I had to modify the base into an aircraft carrier flight deck section. My first step was to prepare the catapult bridle. I removed the insulation from the cables and soldered pieces of brass tube to their ends and short metal rods were embedded into the tubes. After viewing some period photos I decided to use a piece of 320-grit sand paper to imitate the flight deck surface. I cut it to size of the stand and then removed a strip in the middle to allow for the catapult track. Next I punched some holes in both pieces of sand paper and glued them to the stand with acrylic resin. Some styrene profiles as well as pieces of 0.25 & 0.5 mm styrene sheets were used to make the catapult track and the various small hatches and tie down covers.

A base coat of Tamiya XF-69 NATO Black was followed up by some highlights and

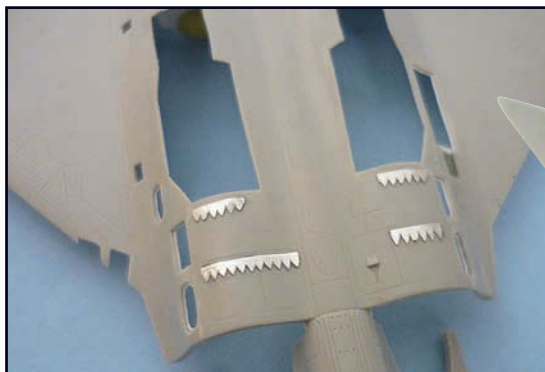




shadows done with XF-63 German Grey and Mr.Color C33 Black. Then I had to give some parts a metal finish. The catapult track was airbrushed gun metal and flat aluminium from Tamiya after masking the adjacent areas, while all the smaller bits were brush painted Vallejo Gunmetal Grey.

The catapult shuttle was made from pieces of 1.5 mm styrene sheet. Once it was ready, I drilled two small holes in the stand, passed the cables through them, and placed the shuttle in the track between the cables. The joint was wrapped with thin twine soaked with C.A. adhesive to hide that the cables were actually passed through the stand. Afterwards I had to weather the deck. I dampened the surface with white spirit and randomly applied various shades of oils with an airbrush and different brushes. These were not only used to apply paint, but also to blur the previously applied oil layers to get the effect of heavily used and not well-maintained surface, full of various stains as well as streaks left by tires. The final touch was to add some small numbers to the panels of catapult track, using a white crayon.

This kit is well known now by modellers but my article is dedicated to the Marine version (Aéronavale) and particularly to the most recent version: the Standard F3. The Hobby Boss kit is good and the assembly quite easy except for the air intakes which require a little attention. However, Hobby Boss made shortcuts on visible details that can be improved, most importantly, it is necessary to update the model to achieve an accurate F3 version. In addition I bought the Skyraider Model Designs (SMDs) resin correction set and decal sheet and also the Dream Model photo etched sheet.



To bring some life to this overall grey finish, I took the decision to open up some areas like the right engine compartment, the main wheel well, the gun bay and diverse little inspection covers. Initially, the areas to cut open are thinned on the inside using a ball bur. Then, it only remains to cut with a scalpel following the engraved panel lines. This technique allows you to save the cut out parts like the wheel bay doors.

At this stage, the tooth shaped reinforcements forgotten by Hobby Boss can be added to the underside. These are mainly present behind the air

intakes and the exhaust nozzle. After many tests with different materials, I opted for aluminium self-adhesive tape sold in DIY stores. The tooth-like patterns are marked out by embossing the tape over the examples moulded on the model. Then, they are carefully cut out with a scalpel. At the end of the assembly, I remade all of them because the aluminium tape glue had a tendency to bleed. I therefore used the same material, but removed the glue from the aluminium with thinners, and finally glued them with cyanoacrylate.



RAFALE **M** Francois Regis Binder adds his own touches to the 1:72 Hobby Boss kit





1:72



Cockpit

The cockpit is quite basic, so I upgraded it by adding plastic card. On the wall and side consoles I added some switches and buttons in order to give some relief detail. I took the opportunity to build the joystick with its support for the forearm on the right side and the throttle control on the left side. On the area behind the seat, two cases are present on the last Rafale versions (F2 and F3).

The photoetch is provided by parts in the Dream Model set and upgraded with additional details.

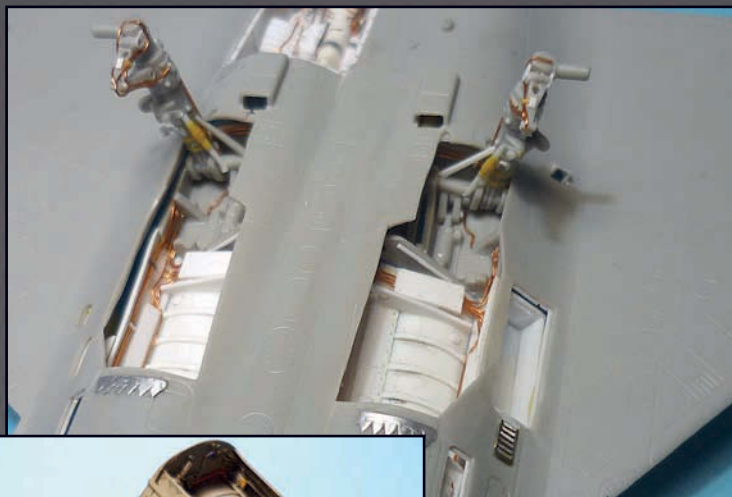
The highly visible seat, is the original with a back cushion (reworked as it's too low) and belts made of thin metal sheet. Buckles come from a photo-etched sheet (Renaissance ref 72009). The main difficulty with this cockpit lies in its overall black colour so it's necessary to highlight and over exaggerate some relief detail, so the overall assembly received a Gunze black coat and a grey drybrush (Humbrol 64).

Wheel bays

As I opened the wheel bay main doors I had to improve on the Hobby Boss forward parts. The bottom is quite a complex shape to replicate so many tests and reworking was necessary to make a good fit with the fuselage. Once the well was complete I started to make the interior detail and cables. Landing gears look good so I only added a few cables and a little plate on the compass damper. I also built a small hydraulic cylinder not present in the kit parts

The forward wheel bay on the naval version has some specific detail from the C version. The landing gear is also updated with missing rib details from plastic and others reinforcements or anchor points. The main hydraulic cylinder is redone with metallic tube from a syringe. Small springs are made by wrapping some copper wire around plastic rod. Often seen open, the small avionic bay placed around the air intakes and the access ladder, are built with Evergreen





Gun bay and grilles

The right gun bay was also opened. I found very few pictures of this area clear enough to work from. I based the detailing on a picture found on the Internet. For the 30 mm gun, there are plenty of pictures. Here again, I constructed an insert to hold the cannon. I took the opportunity to add the little grille in front of this opening, I used some photo-etched grille from Extratech. At this stage, the SDMS fairing could be fixed behind the gun exhaust.

A small defect of the Hobby Boss model is located at the foot of the fin where grilles are poorly represented. Having no idea how to resolve this problem, I called on colleagues who design custom photo-etched grilles who came up with the goods! Thanks to them for all for the help.

Exhaust nozzles

Exhaust nozzles are very basic, not deep enough and quite thick. Dream Model parts improve this area by adding reinforcements on each petal. This option is good but does not resolve the lack of interior details so I used an Aires part designed the F-4 Phantom for the internal area (conduit and bottom). The external part of the exhaust nozzle is made from scratch with thin plastic sheet. Plastic petals are glue together around the ring provided by Hobby Boss, then I added the internal mechanism and the Dream Model reinforcements. In order to have two identical and solid pieces I duplicated the master in cast resin.

The right jet engine is made with Evergreen plastic rod of different diameters. For the area between the two exhaust nozzles, Dream Model Provides a piece but it's too small





small and the inferior kit part should be detailed. The big SPECTRA antenna (Self Protection Equipment Countering Threats of Rafale Aircraft) received a new protection plate too.

Upper grilles

Dream Model provides two small grilles to fix on the fuselage at the wing roots. However nothing is supplied for the very characteristic oval grille located on the right so I had to make my own from photo-etched perforated sheet

Air scoops and intakes

These items are overlooked by Hobby Boss. The air intakes on the model have no internal details so I tried to correct this fault. When studying my reference, I saw that several other oversights were made in this area. First of all, the air intake shape is wrong. I used Milliput to correct the internal shapes. Once dried, the small toothed reinforcement can be added (quite invisible on the finished model...). This correction requires cutting the fuselage to allow the

new air intakes to insert correctly. With plastic sheet, I extended the air intakes and plugged them with an Aires fan in order to simulate the blades.

Standard F3 modifications

It's necessary to perform several modifications (some of them are also present on the F2 version). First of all, the 'Optronique Secteur Central' system (OSF) has to be added just in front of the windshield. This piece is provided in the 'Armée de l'Air' set so a friend of mine lent me this piece and I duplicated it in resin. I also corrected the general look especially the spherical shape which was too big. At the top of the fin, the left Spectra detectors had to be moved to the rear. A piece is provided by the SDMS set but I decided not use it.

On each side of the exhaust nozzles, decoy launchers have to be added. For this modification, I used the SMDS pieces updated with small bolts on their internal surface. On the air intakes, the Spectra

detectors provided by Hobby Boss are inverted. Under the left air intake, Hobby Boss placed a little oval fairing that should be on the right Intake and looks transparent in reference photos.

Other small errors shared with all Rafale versions:

The light on the dorsal edge is not at the point and should be moved by about 1 cm. Missile launchers on the wingtips correspond to the prototype version and the embossing has to be removed. The Anchor points of the canard wings need to move forward 1 mm. Finally, do not forget to fix the 4 tiny triangular antennas around the nose provided by Dream Model.



Paint and Decals

On modern jets, the low visibility grey is now the norm. To get a more interesting finish I searched many photographs and found in 'Air Fan' of July 2011, a particularly dirty Rafale. I opted for Humbrol H1 as base colour, which corresponds to the Humbrol primer but is also very close of the Rafale grey.

A darker grey wash was applied to all recessed detail, after drying, the excess is removed with a paper towel dampened with lighter fluid in order to





create effects of staining, especially on the walking areas.

With small foam pieces soaked in maskol masking fluid, I touched gently the most contacted area of the plane by the crew at work. When dry, the overall model is sprayed with lighter and darker base colour to create mottles on the surfaces. At the end the Maskol fluid can be removed and subtle colour differences are revealed. Decals provided by Hobby Boss are poor quality and I opted to use SDMS decals. These decals are very well printed and all the stencils are present. They are easily placed and fixed in Klear (Future) with no silvering.

Walking areas around the cockpit are provided as decals but I found the grey colour too 'yellow' compared with my base colour so I preferred to paint them, taking care not to make them too visible. On many picture these area are barely visible when the aircraft are dirty.





Conclusion

In conclusion, here are the modifications to obtain a Rafale F3:

- Decoy launchers (SMDS)
- OSF
- Air scoop on the underside
- Toothed reinforcements on the underside
- Arrow-shaped reinforcements and two protection plates under the exhausts nozzles
- Left Spectra fairing at the top of the fin have to be shifted to the rear (eventually use the SMDS piece)
- Transparent fairing under the right air intake and one hole under the left air intake.
- Two boxes added at the rear of the seat
- One F3 specific fairing behind the gun exit.

For all Rafale versions:

- Dorsal light to shift to the rear by 1 cm
- Canard shifted by 1 mm forward
- Correct the Inside of the air intake and add toothed reinforcements
- Correct the shape of the missile launchers on the wingtips
- Add the triangular antenna around the nose
- Add grille in front of the gun access door.
- Add a lateral stick and a throttle grip in the cockpit
- Add an oval grille at the right wing root



B-17G 1

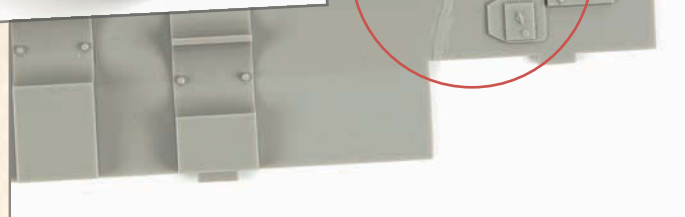
Big Bird

BUILDING THE HK MODELS 1:32 FLYING FORTRESS

BY DAVID PARKER

Welcome to the first installment of our build project on the massive 1:32 scale B-17G bomber from HK Models. Given the sheer size of this model we thought it would be best to split the coverage into bite-sized chunks and hopefully if you are going to build your own example this will provide a few tips and pointers as we go.

My aim here is to take the build on from a purely out of the box assembly with some simple improvements, corrections and details which will address the most visible areas of the kit. With a full interior to the fuselage you could go mad adding detail from end to end but I am just going to work on improving the parts that are easily visible through the windows. Even so this is a big build in every sense, so lets get started!



Starting with the cockpit side wall panels and the moulded on oxygen mask hoses were cut off on each side wall panel and I began to fill the numerous release pin marks that pepper the insides of the fuselage.



I decided to add the fabric insulation panels to the side walls and began by spreading a thin layer of Magic Sculp over the required areas. I use a wooden kebab skewer with the end sliced off at an angle to help spread the putty.



Once it is all reasonably smooth I used a selection of rubber tipped 'brushes' to emboss the different folds a creases into the putty. These are ideal as you get no sharp edges and are very controllable.



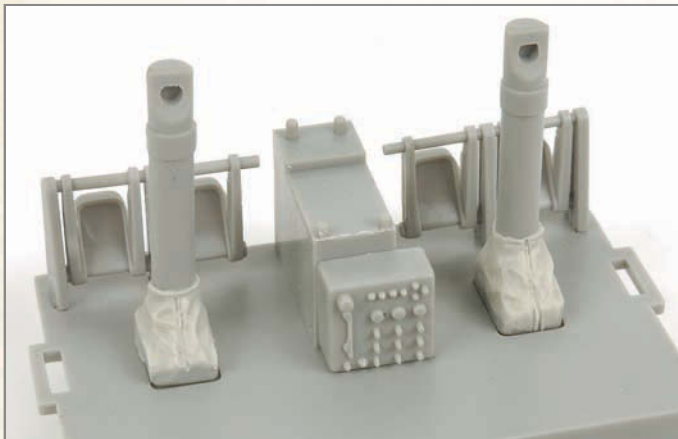
Once the putty has dried any excess or overspill can be easily cleaned up to give this finished effect. Notice how the creases are radiating from the different fittings.



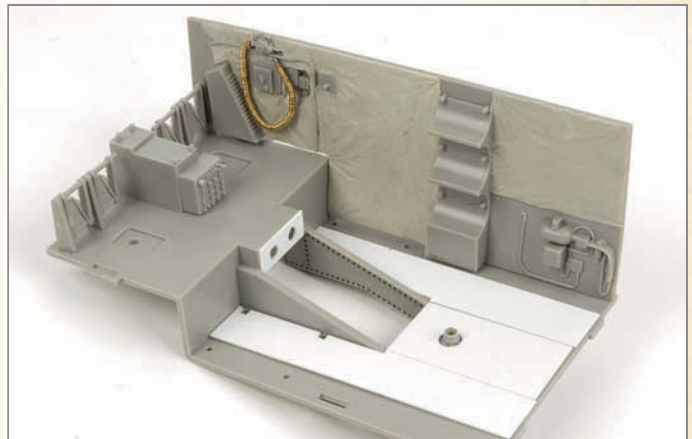
Test fitting the revised side wall with the cockpit floor to make sure that everything still fits as it should and the fabric really adds to the look of the cockpit.



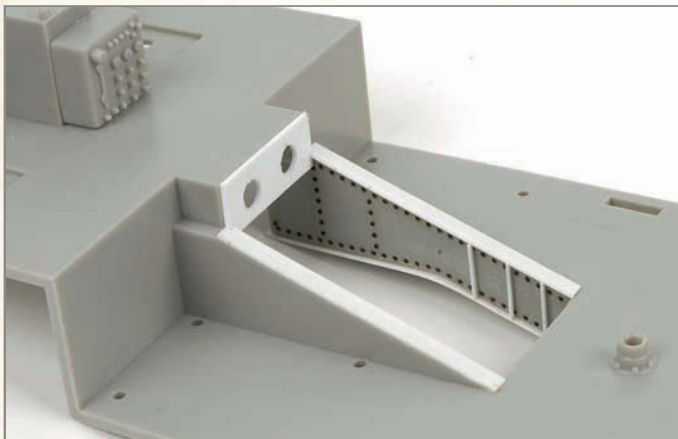
The kit is supplied with crew seats which lack the bright yellow cushions so I made my own again using Magic Sculp. I studied pictures of the real cushions and made sure that the creases on mine were not identical on each one.



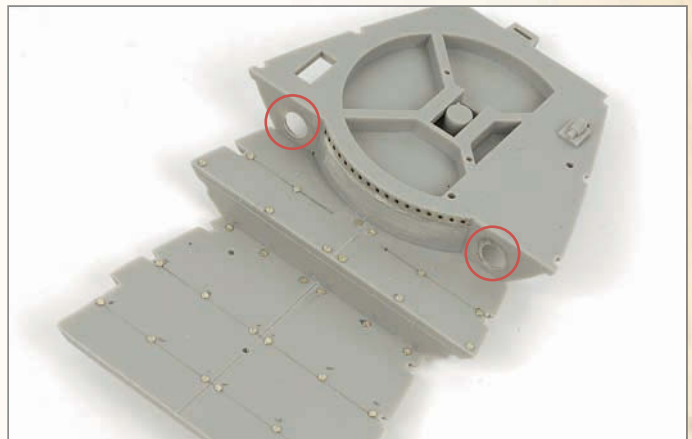
Whilst I had some putty mixed I also reworked the control columns to add the protective gators at their base. Once again the rubber tip brushes were used to add the creases and the zipper lines down the front were drawn on with a sharpened cocktail stick.



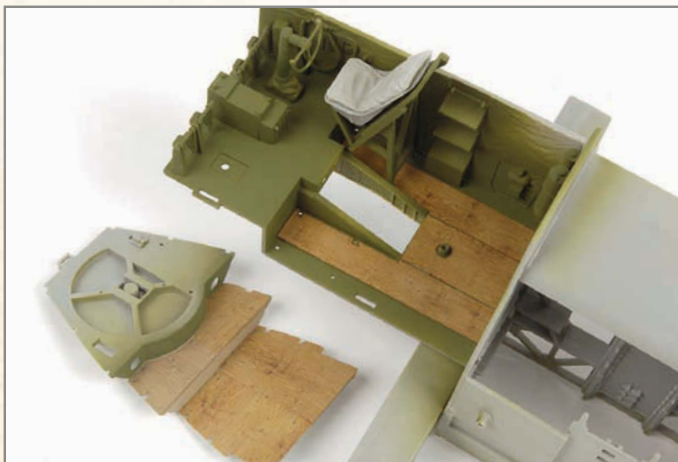
The cockpit floor is comprised of plywood sheets so I cut my own panels from plastic sheet. Work has started on the gangway hatch in the floor with rivet detail added using Archer Fine Transfers Surface Detail rivets. Notice also that the oxygen hose has been replaced with a scratchbuilt example.



More work on the gangway with rib details added and the bridging panel between the two sides having been replaced with a plastic sheet replacement with the two lightening holes added.



Moving to the nose, and the two lightening holes were added to the step along with the rivet detail. Panel lines were engraved on the floor and photoetched screw heads by Aber were added.



Time to get some paint on and the base interior green has been sprayed over the cockpit using Gunze acrylics. The wooden floors have been primed in a pale wood colour and then overlaid with the very effective Uschi Van der Rosten woodgrain decals.



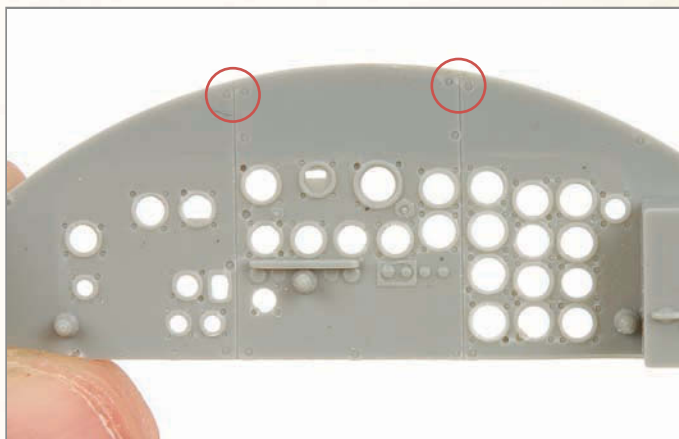
The seat cushions have been painted and shaded and the seats finished in the darker bronze green. The dials and placards on the centre console have also been painted.



Another view of the cockpit at this stage showing the brush painted Boeing logos in the centre of the control yokes - quite pleased with those!



The oxygen bottles at the rear of the cockpit did not have their mounting straps so I cut my own from self-adhesive aluminium foil as a quick fix.



The instrument panel looks a little bland when compared to the real one. I engraved the panel lines and added the rivet detail around each dial using the MDC rivet tool. In reality these are raised details but this method was quick and quite effective.



For the lettering on the seat I recreated the lettering on my computer, faded it and printed it onto some decal film. The 'do not remove from aircraft' warning can just be seen under the seat belts.



The seat belts are adapted from some pre-production HGW belts for the B-25 which I teamed with some spare Eduard buckles - not perfect but they give the right impression.



In the nose again and the drive mechanism for the chin turret is not supplied. I began by making the circular plywood cover plate for the floor. From this I was able judge the size of the central mechanism which was scratchbuilt from plastic

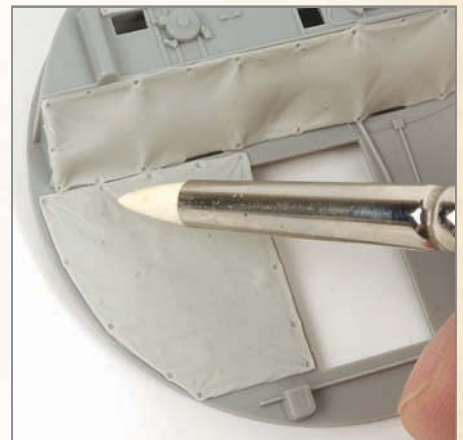


In making the new floor panel it became apparent that the Bombardier's control panel is too deep so I reduced the depth of it so that it did not extend out so far from the fuselage.



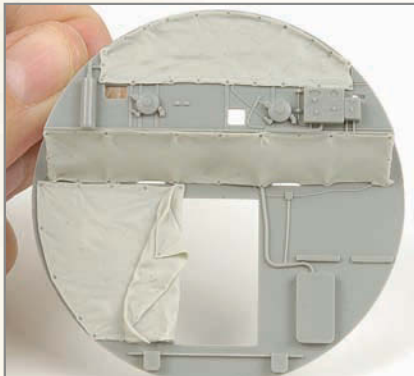
Left More progress on the floor with the motor mechanism painted and fitted and the assorted cables have been added using lead wires. The ammunition boxes are also finished with wood grain decals. Archer Fine Transfers provided the placards on the motor.

Above I had no plans to open the bomb bay so this was assembled and only the bulkheads on either side were painted.



The nose bulkhead as supplied in the kit has the exposed backs of the instrument panel dials visible at the top so I decided to add the missing covers here and on the rest of the bulkhead. I rolled our sheets of Magic

Sculp which were cut to shape and placed in position. The various creases were added using a rubber tipped brush and the circular fasteners were embossed while the putty was still wet.

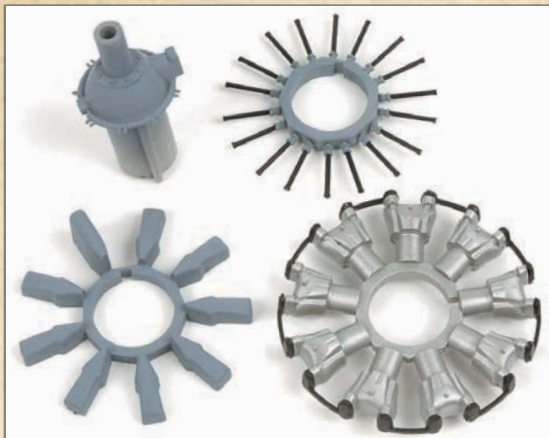


Left The completed fabric covers with the cover for the doorway depicted hanging loosely for a little extra interest.

Below The bulkhead was then painted using acrylic colours. All the placards and assorted small lettering was brush painted to give an impression of lettering.

Right The nose compartment floor is test fitted into position to give an idea of the finished appearance.





Starting some work on the engines I cleaned up the main parts and applied some base colours - done of course for all four engines not just the single set seen here.



The fit is all quite snug and I applied an initial wash to the cylinders prior to moving on.



The wiring system is of course not replicated in the kit so I began to add this by removing the pips around the circumference of the harness ring and drilling holes to accept the lead wire leads.



Time for a little work on the chin turret and I quickly spotted a few errors here. The two slots that allow the guns to pivot should not run right up the back of the turret so I plugged them with sections of plastic.



These were sanded filled and shaped and whilst the filler was drying I marked out the shapes of the two slots in the base to eject the spent cases.



These were the drilled and the slots cleaned up using a scalpel and files to give a regular finish. The turret also lacks the inspection windows on the back but as my turret will be facing ahead I decided not to bother fixing this.



The cleanup ejection slots are seen here and the breaches of the guns have been test fitted too. The zipper covers for the front slots on the turret are reasonably well detailed but I want to add the zipper texture to the centreline.

Here the modified chin turret is test fitted into position with the reworked interior parts which really add to the finished appearance. This floor panel was completely devoid of detail as supplied in the kit.

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Mitsubishi A6M2

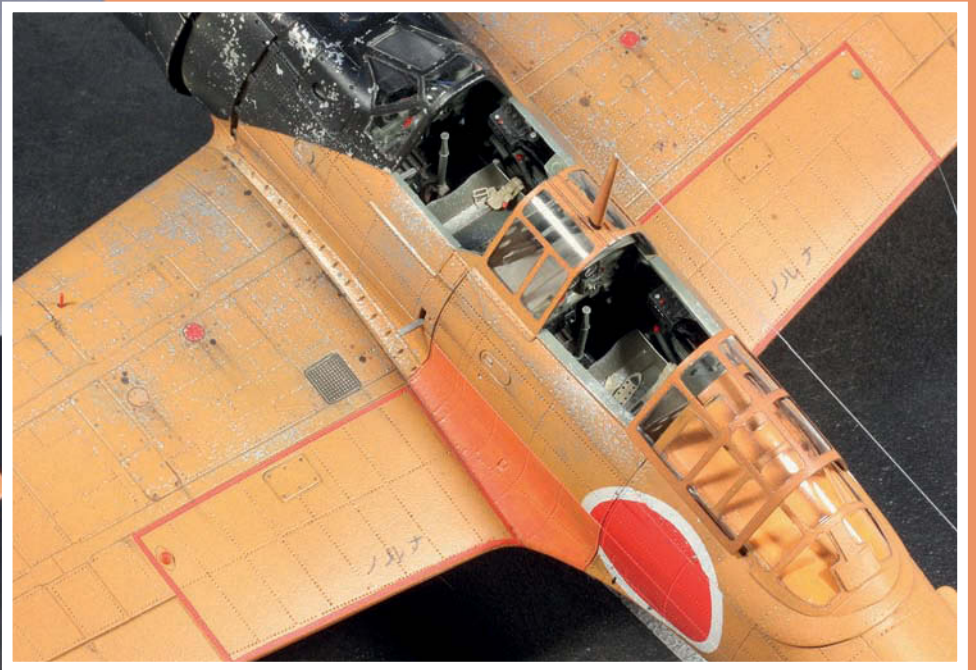
TWO-SEAT ZERO TRAINER

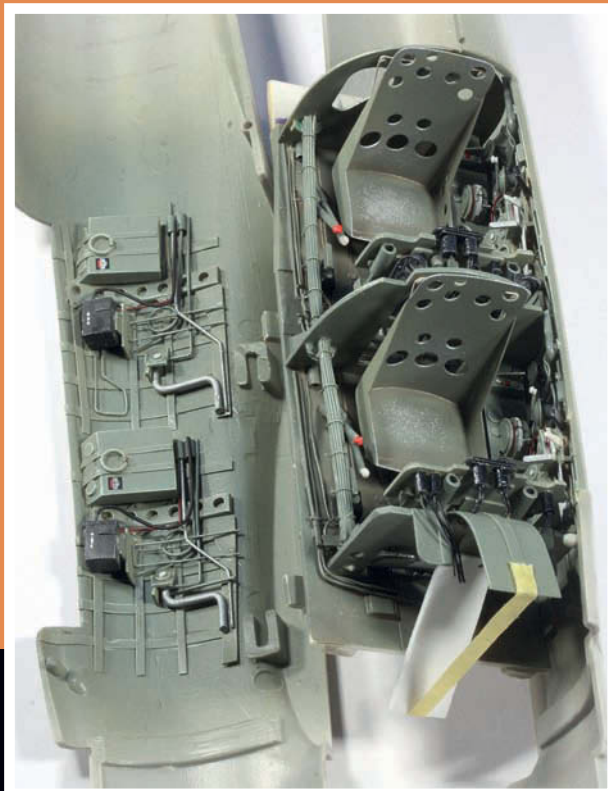
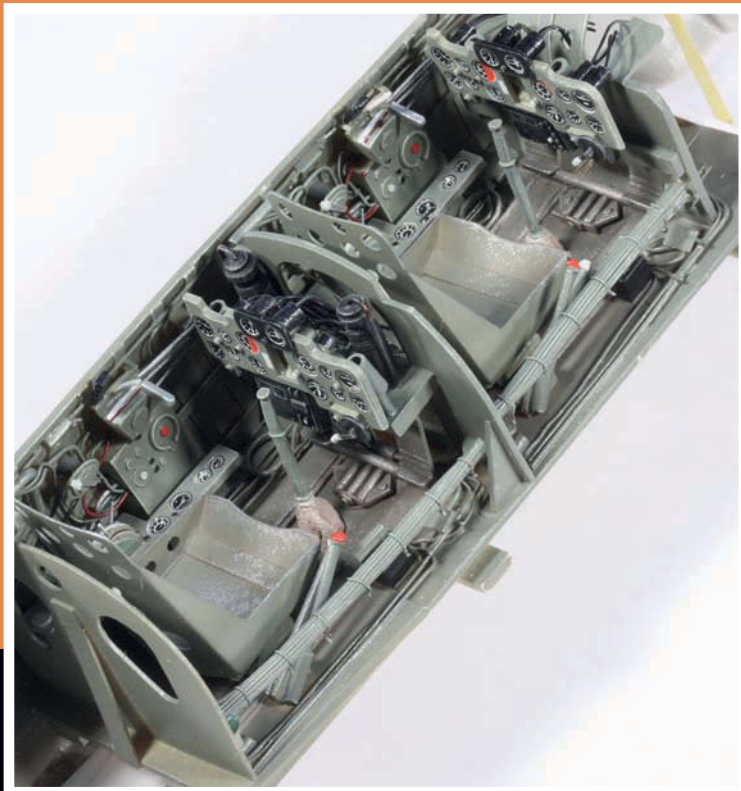
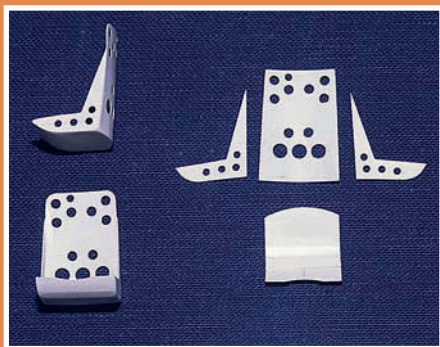
Way back in 1989 I started a 1:32 A6M2 Zero from Swallow Model that I wanted to rework into a 2-seat trainer. I started with a lot of optimism but soon I realized that it was a difficult conversion as no reference information, except for some photographs, was available. After having made the basic parts of a complete new cockpit from scratch and after working out some basic adaptations and changes to the unassembled model, I decided to shelve the project. I put all the pieces back in the box, and put the box in the cupboard and forgot about it for 23 years!

It was in the beginning of this year that I started a 1:32 Tamiya A6M5 Zero and, when checking my reference books, magazines and the internet, I remembered my old two-seat trainer project again! I had a closer look at the parts of the Tamiya kit and I came to the conclusion that now there was enough material available to finish the job I had started in 1989.



1:32





Building

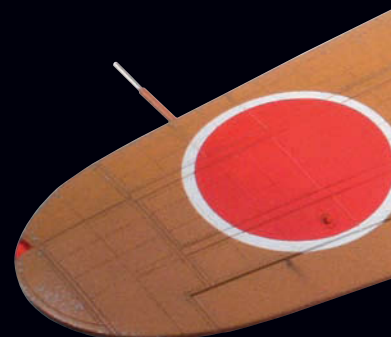
The old Swallow kit has only basic detail in the cockpit and wheel bays, but is fairly correct in terms of size and has nice, engraved panel lines although they are on the(very) heavy side. Fortunately this can be used to good effect when painting and weathering the model later.

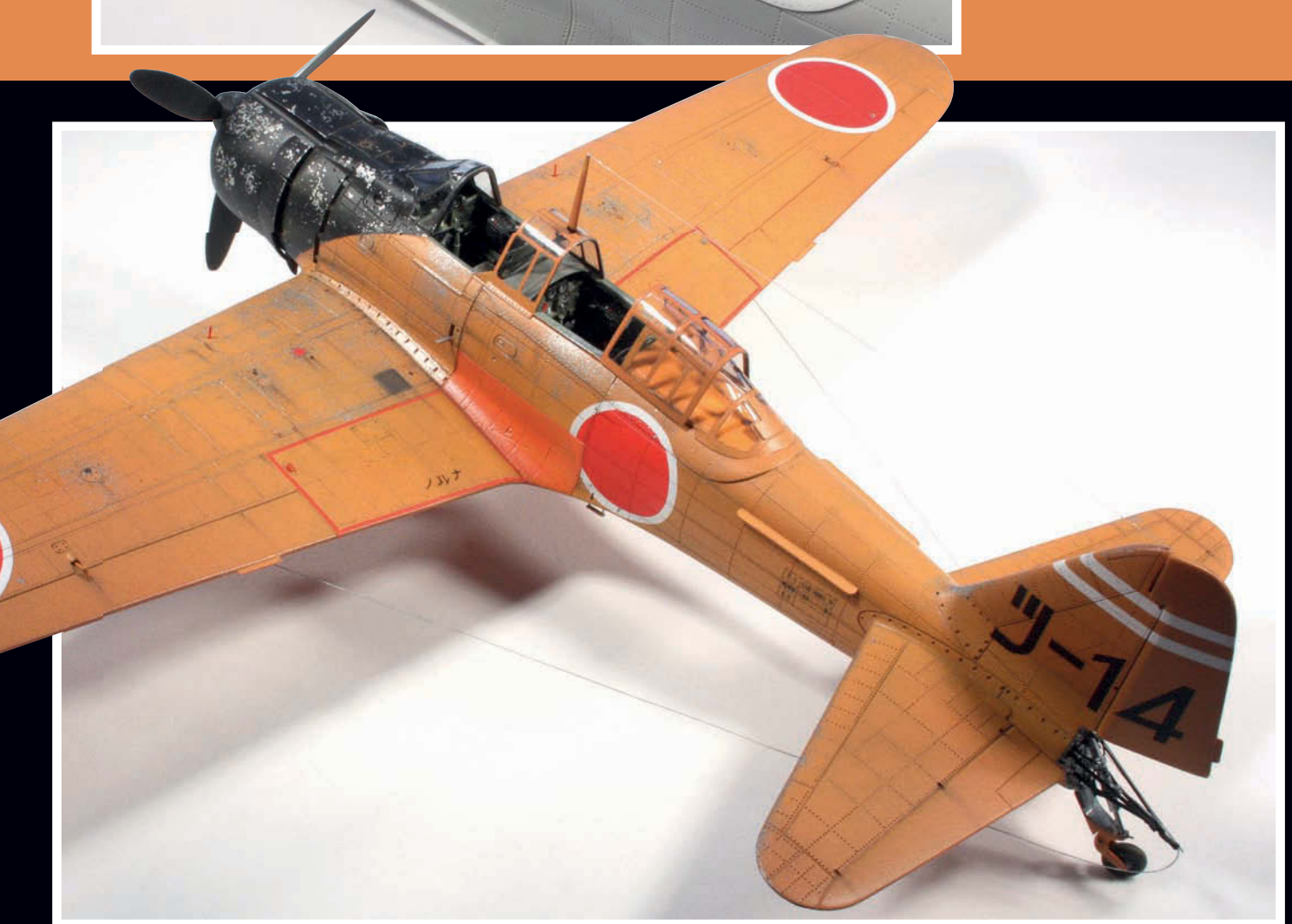
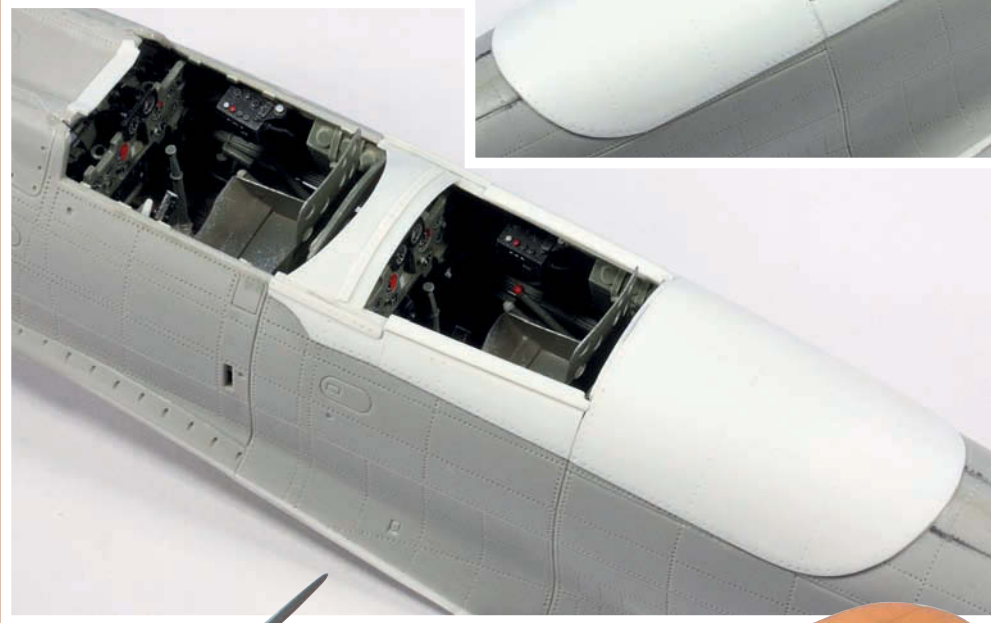
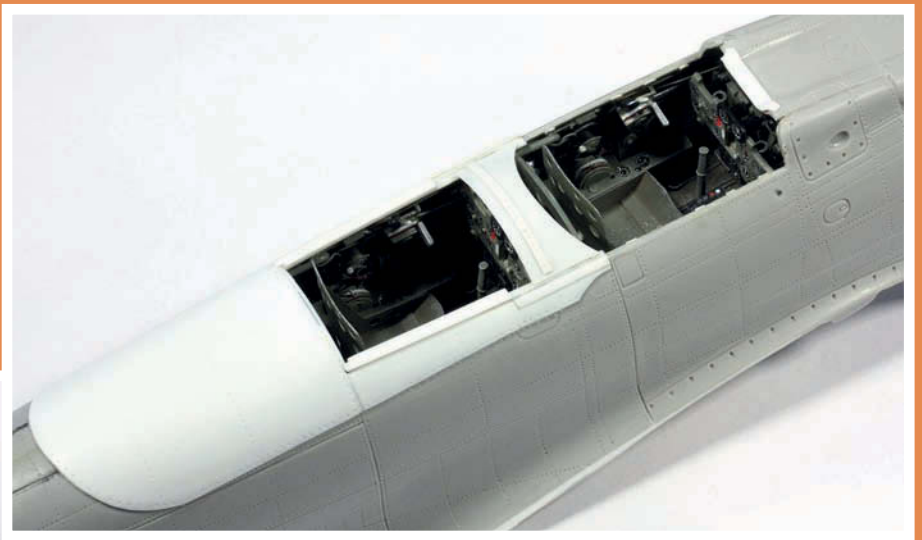
As no after market conversion sets are available, I had to complete all the basic details and the two-seat canopy from scratch. I went to work building the complete interior of the cockpit with its seats, instrument panels, equipment, levers and handles, wiring, gauges, etc. I used the parts from the kit for the windscreen and the rear canopy and used a spare canopy part of the Trumpeter TBM Avenger kit 1:32 to create the fixed middle canopy where the antenna is mounted. Furthermore I detailed the radial engine adding the wiring and I reworked the cowling flaps and exhausts. The main

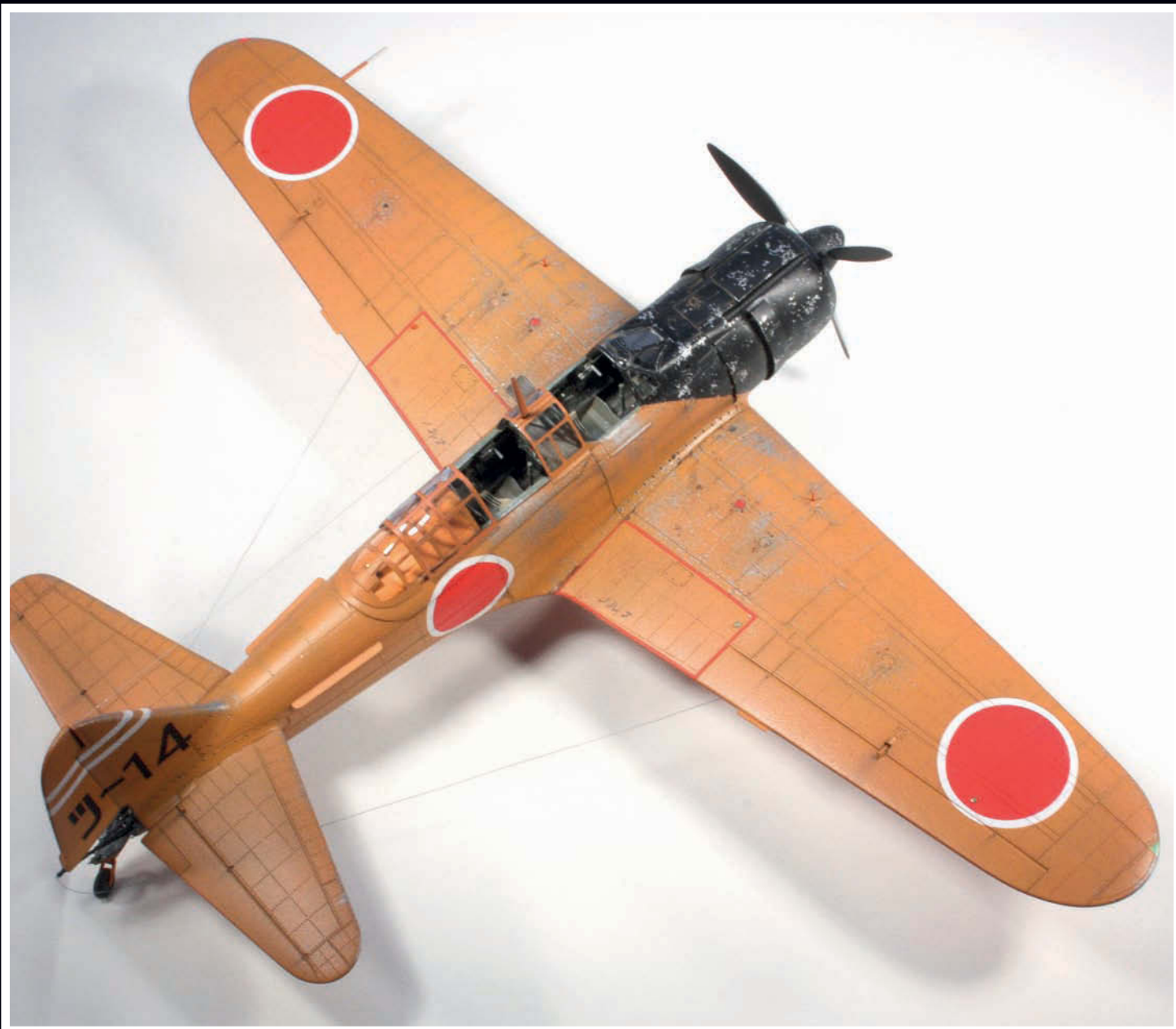
landing gear was detailed with the brake lines, I also made new actuators for the ailerons. The tail wheel assembly with the towing cable gear to tow targets for air gunnery practice was completely built from scratch, even the actuator. However I did not rework the wheel bays, which are not really deep enough in the kit.

The seat belts were made from lead foil, cut to the correct size, bent in a realistic way, painted, varnished and weathered, and the buckles were made from spare photoetched parts. The navigation lights, not provided in the kit, were made from the transparent coloured plastic handles of old tooth brushes, cut up and sanded to shape.

The underwing pods for the gunnery target banner were made from a knitting needle. They were cut to size, shaped to give a slightly pointed nose and an open back end with the stowed banner inside.







Painting

Two seat Zeros were painted in different ways, either in overall Orange with a black cowling and ant glare panel, overall Grey with black or Green on the upper surfaces and Orange on the under surfaces. In general, archive pictures show frequently-used aircraft with the classic Japanese heavily chipped paint in varying degrees from light to very heavy. I went for an Orange plane with the paint visibly worn and chipped off.

I started by giving the model an overall coat of Alclad Dull Aluminum after which I sprayed 2 coats of Gloss Varnish. When thoroughly dry, using a small sponge I randomly applied Maskol across the cowling, the leading edges of the main wings, the wing roots and all the places that are stepped on by the ground crew when servicing the aircraft.

I do not paint my models using the 'pre-shading system' but prefer to give colour effects with pastels (see later). So, now I sprayed an overall coat of Orange that I made by mixing International Orange with White and Yellow. I had to adjust the

mixture of the paint several times before getting the right tone. Once dry, a diluted coat of a lighter Orange (3 parts thinner – 1 part paint) was sprayed on the upper surfaces to give the bleaching effect of the sun and I added some more Yellow to the basic Orange mixture.

The National insignia were spray painted under the wings and on the fuselage. I used masks easily made with a compass and a sheet of masking tape. After thoroughly drying, using masking tape I removed the Maskol that was still remaining under the 2 last coats of Orange. By patting the tape onto the model and pulling it away, the Maskol is removed resulting in a realistic chipped paint look. The last coat before weathering was an overall coat of Gloss Varnish (2 parts thinner – 1 part Varnish).

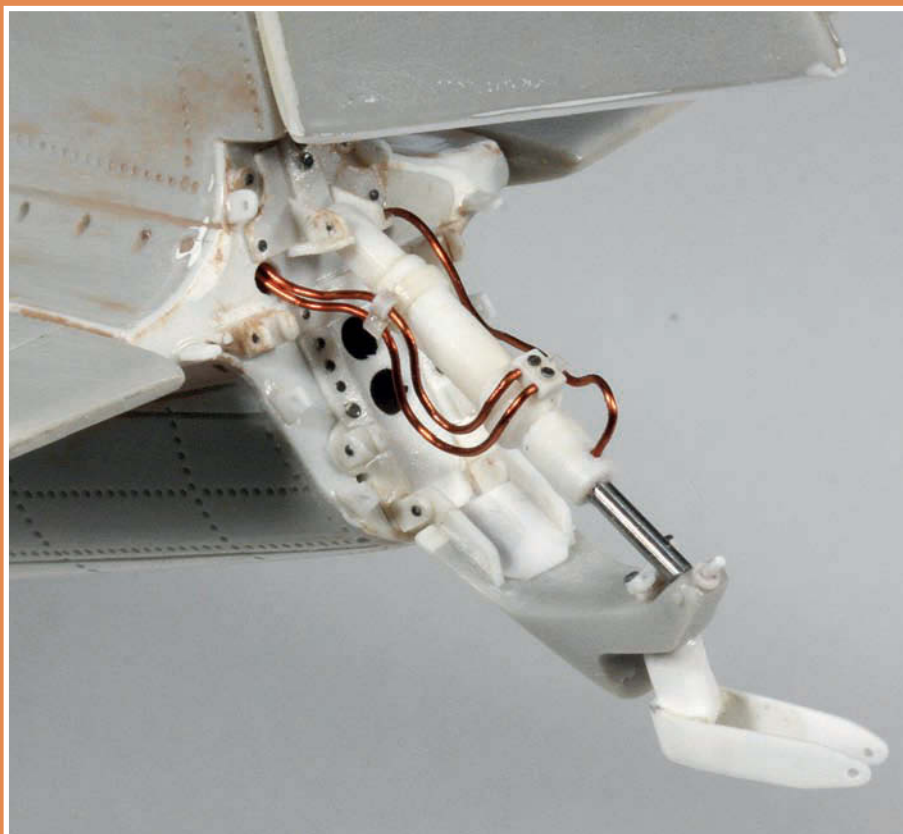
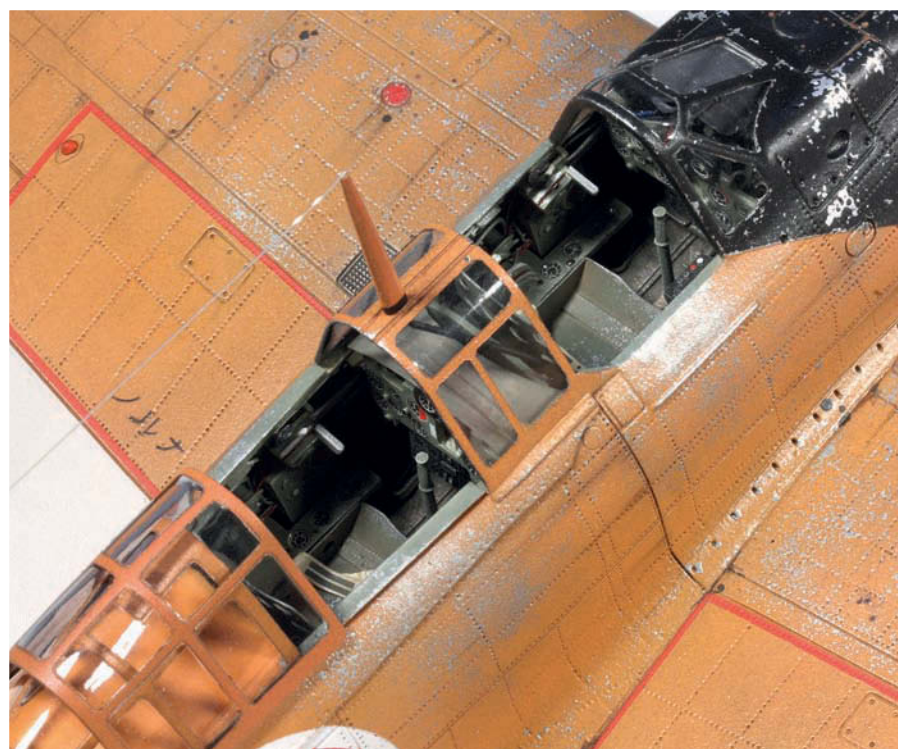
Decals

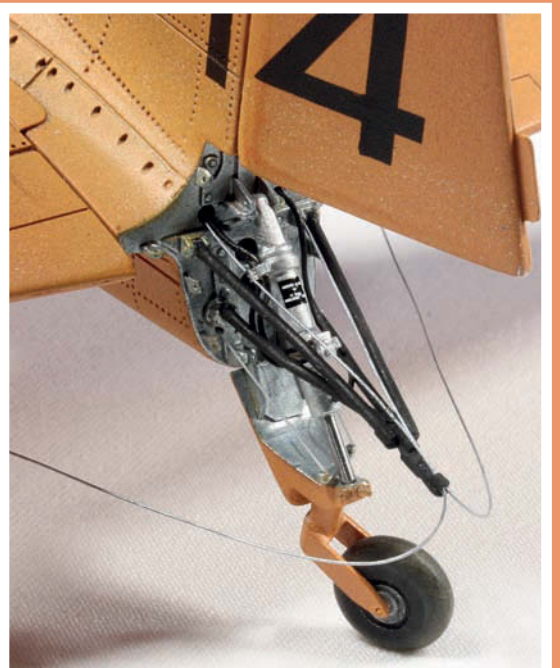
I could not find decent aftermarket decals with the correct size and I decided to make them myself, after all, the codes are simple and easy to make. I drew the tail symbols and numbers in reverse on the

reverse side of a black decal sheet from Microscale Decals, cut them out and put them on the model using the proven MicroSol & MicroSet system. The Japanese 'No Step' warnings above the flaps were hand painted.

Weathering

For the weathering of a model, I use my own system which consists of 2 steps, the first on the glossy coat of Varnish and the second on a lightly shiny finishing coat of Varnish. After cleaning the entire model with lukewarm water with a drop of detergent soap (after thoroughly drying of course), I accentuated the panel lines with a sharp 'Bordeaux-Red' coloured pencil. With pastel chalks you can buy in every art shop I made pastel powder by sanding the chalks on sand paper. Depending on the colours of the model, I use darker or lighter tones. For the upper sides of this model, I used a mixture of Burnt Umber and Red and another mixture of Burnt Umber, Grey and Black. Working with pastels on a glossy surface has the big advantage that, even with intense weathering, the surface







is not affected too heavily and any overdone mistakes can be corrected by cleaning with a wet cloth. On the places where the aircraft is boarded or serviced, some dirt and oil patches were simulated. Once the first weathering is completed and the basic look of the almost finished model seemed good, a finishing coat of varnish (5 parts Gloss + 1.5 parts matt) was sprayed over the entire model. On the final coat a second weathering was done (more carefully than the first one), this time with Dark Brown and Black pastel powders. The heavy exhaust strains and other less pronounced airflow strains were simulated and some dirt and oil patches on the inner sides of the wings were created as well.

Finishing the A6M2 Zero Two Seat

All details such as antenna, pitot tube, boarding steps, gunnery target banner pods, wheels, flap and aileron balances, etc. were put in place. The towing cables, made from fishing line painted Steel, were attached to the pods and sweeping equipment. The wireless antenna was made from metal coloured stretched sprue from the box of spares. The base was very simple. I used a rough vinyl floor tile and cut it to the right size. Then I sprayed the White lines and the base was weathered using Sand coloured pastel powder. The wheel chocks were scratch built from sheet styrene, painted Yellow, lightly weathered and finished with a handling cord. The finished base was sprayed with a varnish mixture of Dull (5 parts) and Gloss (0.5 part).

References

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A6M Zero in action
- Aero Detail
Mitsubishi A6M Zero Fighter
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No 5 + No 9
- Robert C. Mikesh
Japanese Aircraft Interiors
- Monogram Close-up 14
Japanese Cockpit Interiors

TAMIYA'S 1:32

P-51D

GIROLAMO LORUSSO

models the
Mighty Tamiya Mustang



Whenver Tamiya announce a new release the modelling world waits expectantly, and never more so than with their beautiful large scale aircraft. This kit was built for a friend who wanted to display the model in his shop which stocks the Tamiya brand. I finished the model in around a month building it from the box without adding any extra details. To tell the truth, this kit is just so nice with such beautiful detail and design, it's a pleasure to build it as Tamiya intended.

Each piece is assembled with extreme ease and the removal of parts from the sprues is designed in such a way as not to mar any visible areas. With a stroke of the sprue cutters and a very light file the pieces are ready to be assembled and I guarantee that the use of filler is superfluous if the parts are carefully assembled correctly.

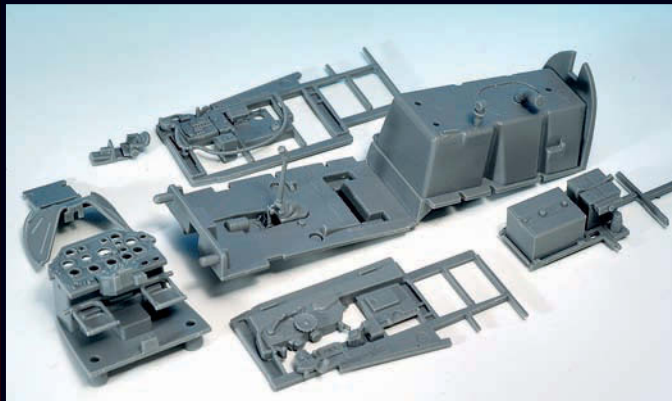
The contents pack the box to the brim; styrene sprues (twenty two in all), two sheets of photoetch, poly caps, vinyl tires, screws, nuts, small magnets and even the inevitable screwdriver! The three proposed versions are all aircraft that were part of the Eighth Air Force located throughout Europe; 334 th Fighter Squadron , 4th Fighter Group- personal aircraft of Lieutenant Arthur, with the cute pin up 'Blondie' nose art, the nose forward of this and the tail are red. Obviously this was my chosen scheme.

Alternatives are 478th Fighter Squadron , 352th Fighter Group . Aircraft commander Lt. Colonel Meyer , the legendary blue-nosed 'Petie II' in August 1944 and 79th Fighter Squadron , 20th Fighter Group, Captain Webb with numerous mission marking on the muzzle from April/November 1944

All aircraft are in natural metal finish except for the last which displays patches of olive green on the upper surfaces, an interesting variation to produce from a modeling point of view with the reproduction of the patchy surface .

I chose the red nose and tail as it goes well with the aluminum colour creating a lively and excellent colour contrast. The use of Alclad II lacquers, I would say, is a must for a perfect bare aluminium finish. Take your time to follow the application process and practice on spare parts if it's your first time using Alclad, some beautiful realistic results can be achieved.





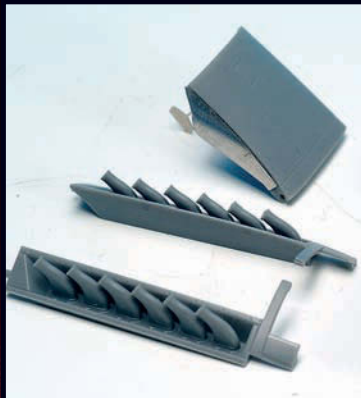
There's little to point out when building this kit, just follow the instructions, glue and paint each piece as Tamiya intend and lovers of the P- 51D will be very satisfied with their accurate replica. I only have two pieces of advice to give from my experience: The first; It is best to replace the gear legs with metal ones from Scale Aircraft Conversions, certainly more robust than plastic ones, in spite of the steel insert the kit provides. The second; The Tamiya decals are nice but not quite as good as some available and also could be

replaced, even if the three subjects offered are among the most beautiful!

I followed, almost to the letter, the instructions of the kit. The first step is to assemble and mount the engine, really well done in that it can be left on show by means of an ingenious system using minute in-built magnets inside the cowls allowing easy removal and re-fitting. The engine is a little kit in itself with nice detail which I enhanced with some drybrushing over the black base-coat. Once painted it

can be attached firmly to the cockpit via the sturdy pegs.

The cockpit, as the engine, is a kit within a kit mostly coloured in the classic "interior green" which I choose Gunze H 58 as a very good match. On top of the base coat the various sub-assemblies are shaded and weathered with washes, highlighted and detail painted including some areas of worn paint

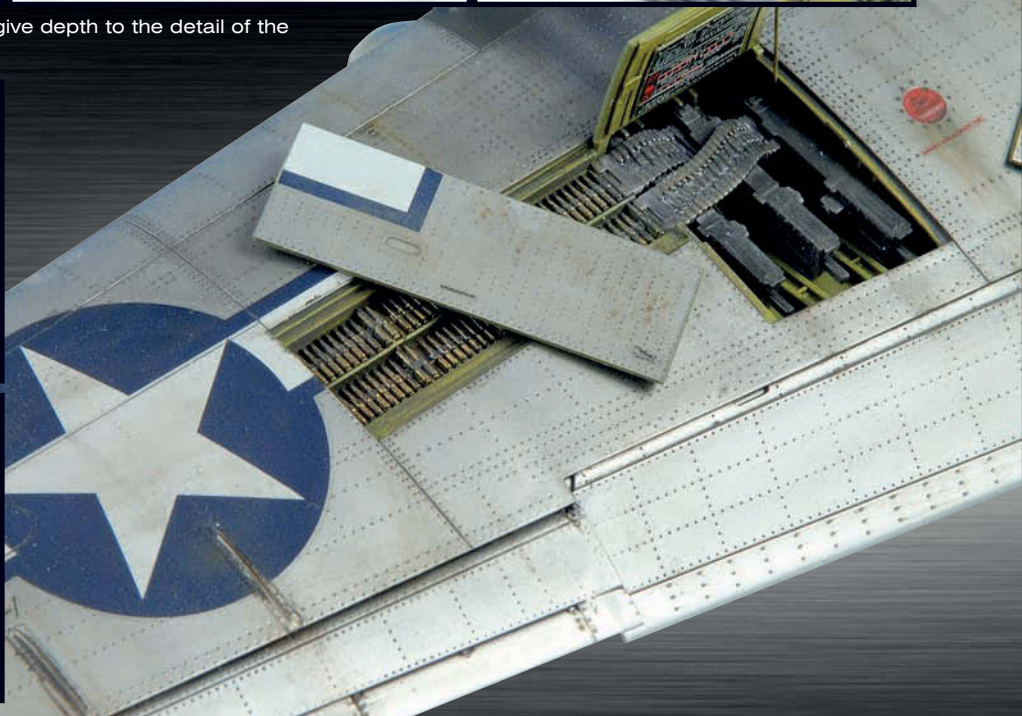


The model progressed smoothly without finding even the slightest hitch. The only piece that deserves some attention on the fuselage assembly is the radiator covers which I found the fit not as perfectly as the rest of the model, a very minor point and still not worthy of any filler. Joining the wings to the fuselage did require an application of Mr. Surface 500 to close the join a little. Once applied by brush, a gentle wipe with a cotton-bud wet with Mr.Color Thinner produces a clean seam without the need for sanding.





Above: contrasting shadows and highlights give depth to the detail of the gun and wheel bays.



All the control surfaces of the aircraft can be placed as per the kit instructions and remain moveable. I found this feature a little toy-like for my tastes and had concerns about stability in future so decided to fix mine with Tamiya Thin Cement when I'd decided on the position.

For such a big kit with many parts, assembly is so fast and, without realizing it, you get to the painting of the exterior. As already mentioned, I chose the color scheme of red and aluminum. When choosing an aluminum finish I have no doubts about the paints to use- Alclad II !

Why? I found these colours back in 2004 and using only the few colours available then I achieved great results. These

lacquers are very simple to use, no need to dilute them because they are already ready to airbrush, won't clog the airbrush and have a fast drying time of only ten minutes. Truly the ultimate metal finishes! They have a good resistance to both the tape and masking fluid, so they can be masked with extreme simplicity. Alclad also has a strong resistance to solvents such as those found in oil paints. Their pigment is made of aluminum powder to replicate the real metal, you just have to follow the rules of the manufacturer: primer, black paint and colour of your choice. One thing to note is to spray with good ventilation, lacquers should not be inhaled. Today, the range has been expanded considerably with new colours and I've added to my series of colours becoming irreplaceable for me to achieve

metallic finishes on my models. I've heard occasionally modellers complain about problems using Alclad's system, but following the rules carefully has never given me a problem. I coloured the entire model in 'Aluminum base A' . In addition I chose shades compatible with the reference I was working from noting that the control surfaces were significantly brighter than the rest of the airframe and subtle tonal differences of panels throughout.

The anti-glare section of paint in front of the cockpit was masked and airbrushed in Gunze 52. More Gunze, 327 red, was airbrushed across the nose area and tail, but first an undercoat of flat white and shading in grey gives good depth and shape to the ribbing of the tail control surfaces.





Above: the painting sequence for the bare metal areas using the Alclad II system and colours.
Below: shading and highlighting of the tail's ribs produces a pleasing and realistic effect





Many modellers don't like vinyl or rubber tyres due to the inevitable moulding seam being difficult to remove, rotating against a coarse sanding stick achieved a better finish



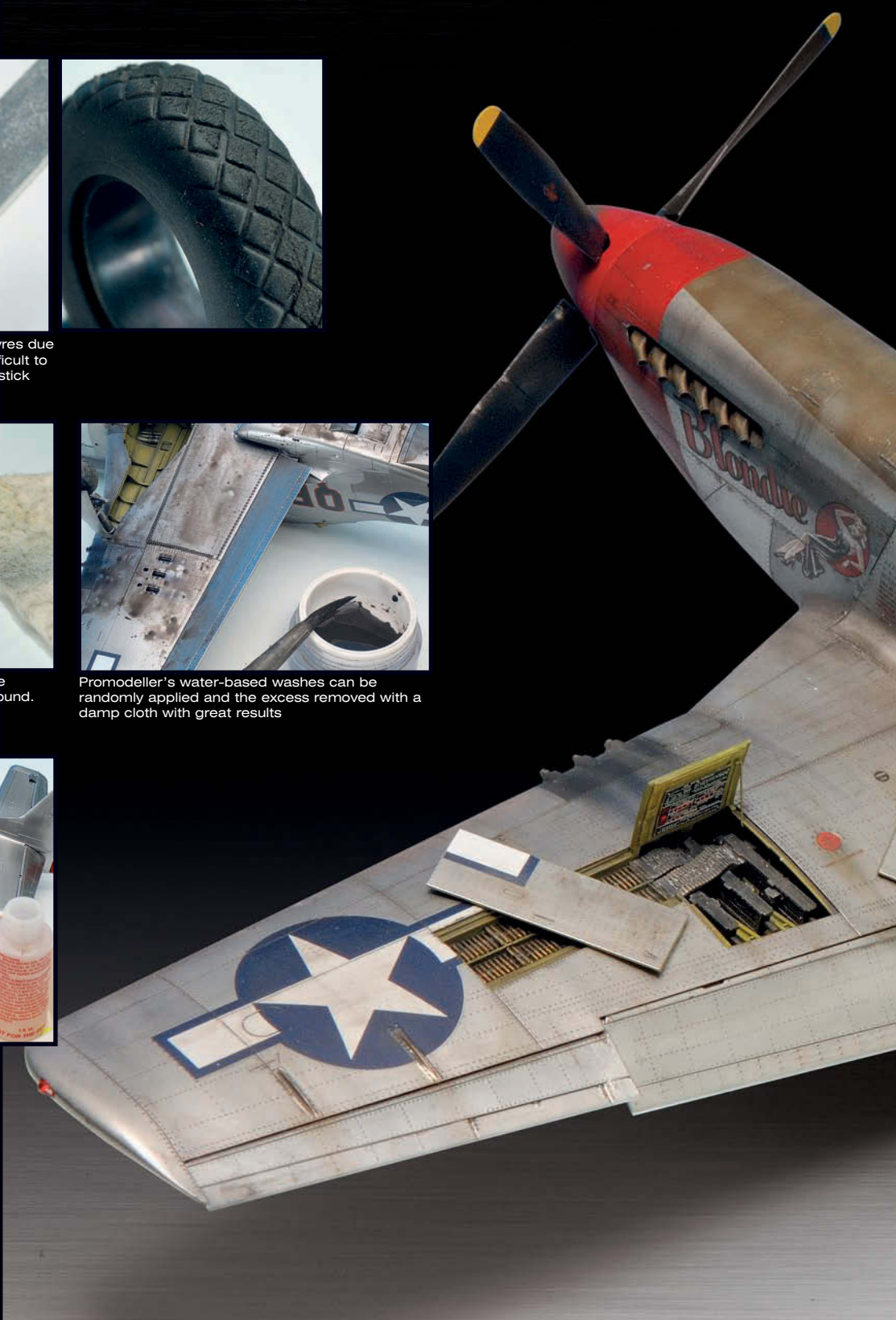
The canopy was polished with an ultra-fine sanding stick and Tamiya polishing compound. Tamiya wax gives the final sparkle.



Promodeller's water-based washes can be randomly applied and the excess removed with a damp cloth with great results



Micro-sol and Micro-set help the decals settle into the detail directly onto the Alclad surface.



P-51D



Tamiya engineering at it's very best allows numerous panels to be left open including magnetic fixing of the engine cowls.

The Micro-sol and Micro-set system helped settle the decals into place once all paintwork was completely dry. As I mentioned earlier, although good, some better quality decals are available from the after-market guys.

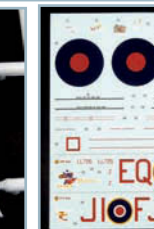
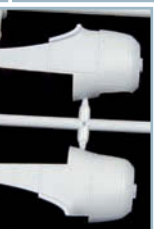
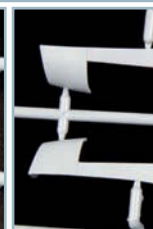
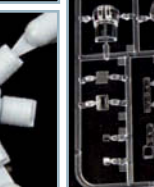
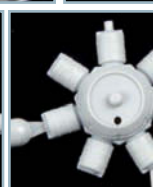
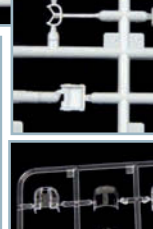
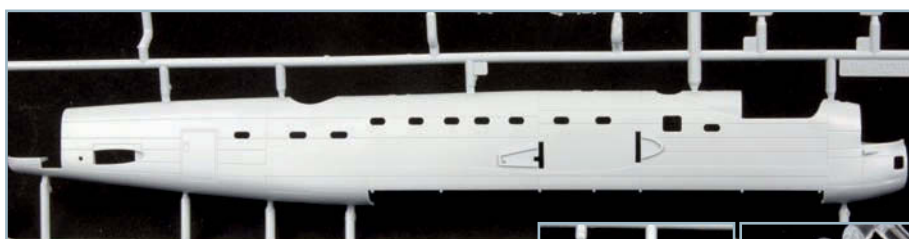
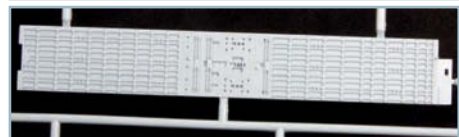
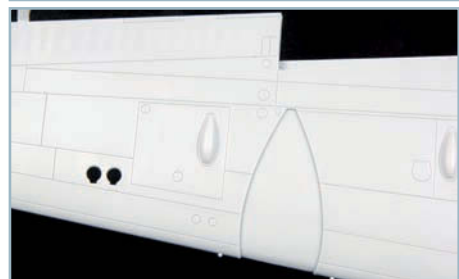
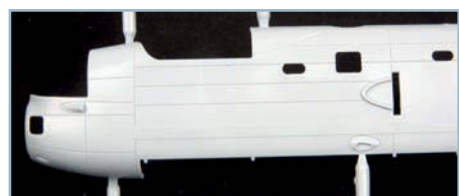
For weathering I tried a new product (to me anyway), water-based washes from Promodeller to emphasize the panels and

fastener detail. A mix of black and brown was applied and dried quickly with the aid of a hair dryer. Their use is very simple and non-invasive compared to an oil colour or solvent-based wash. I would recommend these liquids to all those who fear the use of oils on their freshly airbrushed finish. More new products were tried at this stage, the range of weathering powders from Tamiya themselves. I was very

satisfied with how these powders performed giving great control and subtle tones adding nice realism.

What more can I say? A model with extraordinary features that provides the ultimate modelling pleasure, from opening the spectacular packaging to giving it pride of place in your collection. One of the true Tamiya classics. Happy modelling!

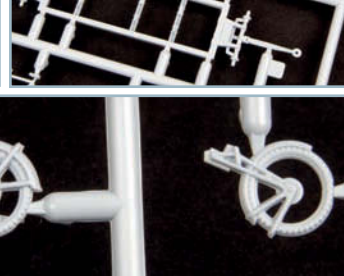
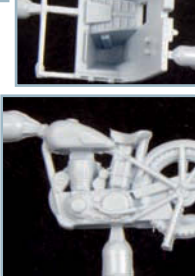
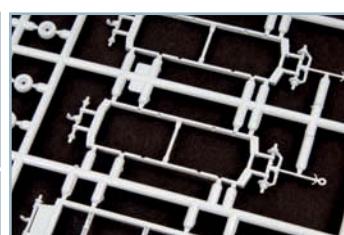
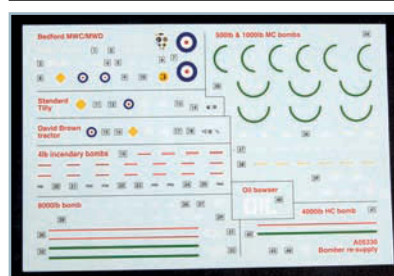
AIRFIX new releases



Airfix 1:72 Avro Lancaster B.II

I don't recall ever seeing a styrene kit of the radial engine B.II so a master-stroke from Airfix to build on their new tooling and produce this version. A very attractive and chunky box will feel like instant value for money and lifting the lid confirms this as we're packed out with sprues. The moulding quality is immediately apparent, nice fine surface detail across the fuselage and great finesse with the smaller details show that Airfix are really on a roll these days with consistent high quality in all their new releases. A full new sprue provides engines, cowls and nacelles which all look very nice indeed and as with all of the kit we're free from any flash or sink marks. Internal details are good with bulkheads and the bomb bay becoming an integral part of the models strength with good sized

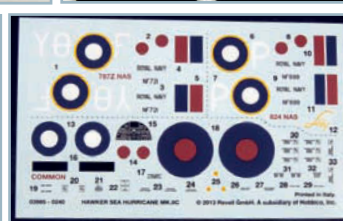
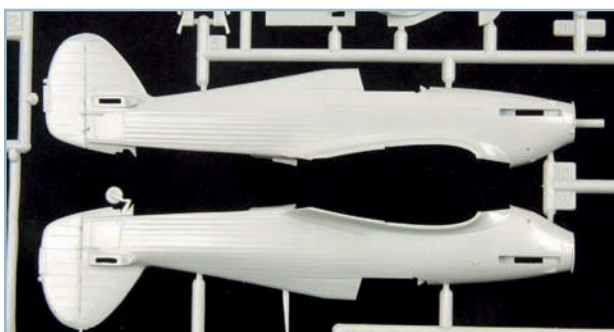
wing spars allowing sturdy wing alignment. Along with a well detailed interior we're offered positionable ailerons, flaps rudders etc, weighted tyres, optional bomb doors...great stuff. If you want to display a bomb load it's available with the new re-supply set we're taking a peek at below. Cartograf decals provide two options of markings, B.II, DS842, 514 Sqn, JI-F, 'Fanny Ferkin II', RAF, 1944 and B.II, LL725, 408 Sqn, EQ-Z, 'Zombie', RCAF, 1944. My Father-in-law happened to call by when I had this kit spread across the bench, he used to produce tooling for Airfix 'way back when', and was staggered at the quality of tooling and moulding. An all-round top-notch kit which will be welcome by occasional hobbyists and the more serious modeller alike- fantastic value!



Airfix 1:72 WWII RAF Bomber Re-supply set

What better accompaniment to their Lancaster than this set of ground supply equipment? a really fresh idea from Airfix which we were instantly impressed with. The packed box provides an Austin Tilly, Bedford MWD (or an MWC can be built) maintenance tower, 450 gallon fuel bowser, 1000lb bombs, 80000 bombs, bomb trolley and tow tractor, ladders, more bombs, motorcycle, bicycle...everything you might need in fact, except ground crew

figures which would have been a bonus. The detail and design throughout is superb with ease of assembly in mind, beautifully rendered tyre tread patterns, detailed chassis, even the canvass hoods are first rate. Decals provide all the markings you'd need and are perfectly printed. This set would really produce a busy and detailed diorama and I'm sure will be just as popular with modellers of British vehicles. Top marks Airfix.



Revell 1:72 Sea Hurricane Mk.II C

A re-release from the late 1990s here of Revell's small scale Hurricane with its plug-in rear lower fuselage to create the Sea Hurricane. Moulding is decent but the tooling shows it's over a decade old with some flash present and simplified detail in places. That said, the surface details such as panel lines and the fabric surfaces are really very nice indeed and being a simple build would really warrant some extras thrown at it, a resin cockpit

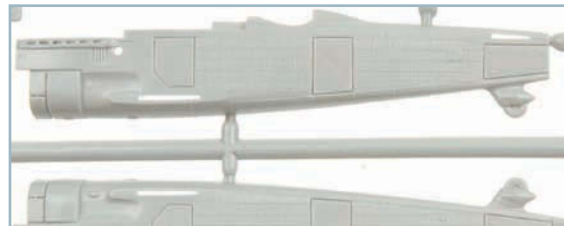
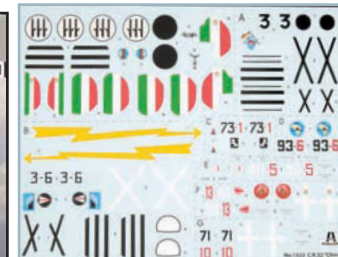
and exhausts would certainly raise the game here and the low cost of the kit means you can keep within a very reasonable budget. Top quality decals provide two sets of markings making this still a decent small scale Hurricane. Revell model kits are available from all good toy and model retailers. For further information visit www.revell.eu or email ukbranch@revell.de



Lifecolor paint and pigment sets

Three sets of colours here from one of our favoured paint manufacturers, Lifecolor. Set XS 09 is six colours to suit Finnish aircraft of the WWII era produced in cooperation with Ilmailumuseo aviation museum. These acrylics airbrush beautifully but we've found Lifecolor's thinner to be the best medium to get your paint to the right consistency and prevent the paint 'beading' on the surface. Lifecolor performs equally well brushed. Two sets probably aimed at armour modellers but equally applicable to

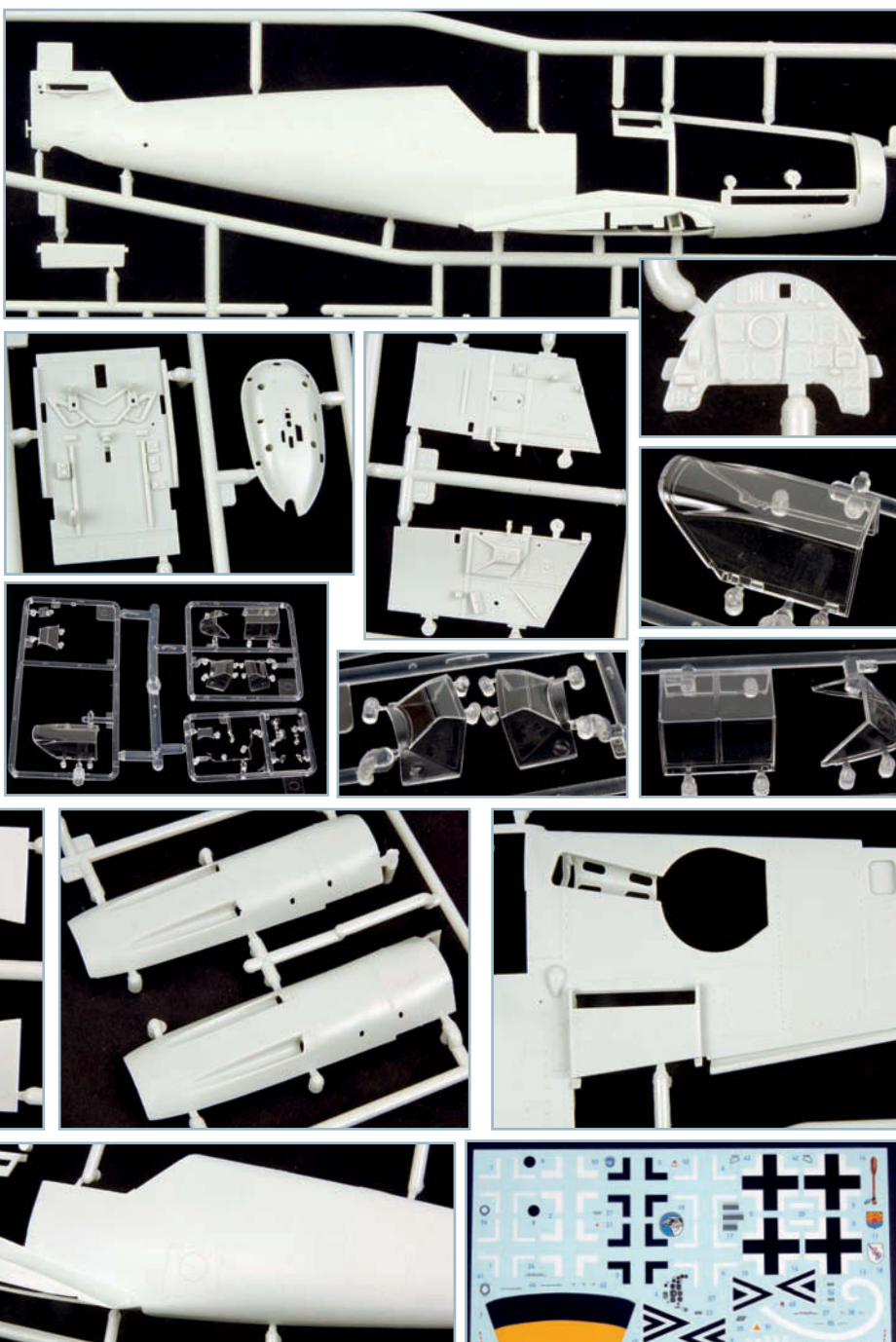
aircraft if you're looking to add some weathering or create groundwork. 'Dust' and 'Mud' each contain three paint colours and three pigment powders with specifics such as 'Eastern European dust'. Both the acrylics and pigments can be mixed to produce subtle variations. Ideal for those undercarriage wheels and very handy sets. Lifecolor products are distributed in the UK by the helpful folk at the Airbrush Company www.airbrushes.com



Italeri 1:72 CR.32 'Chirri'

'Historic Upgrade' as stated on the box may refer to the age of this original 'Supermodel' tooling (a spin-off from Italeri if I'm not mistaken) which must be from the early eighties. It looks as though Italeri have re-jigged the sprues and amended a few parts along with the inclusion of a clear stand to give the option of displaying 'in flight' although the pilot figure has been omitted which makes the stand a bit of a nonsense! A simple kit in this scale, the CR.32 is undoubtedly a beautiful aircraft of the era and the detail presented is decent if not spectacular. An attempt to replicate a texture on the fabric surfaces is over the top in 1:72

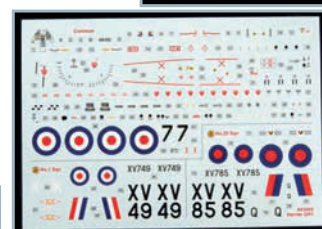
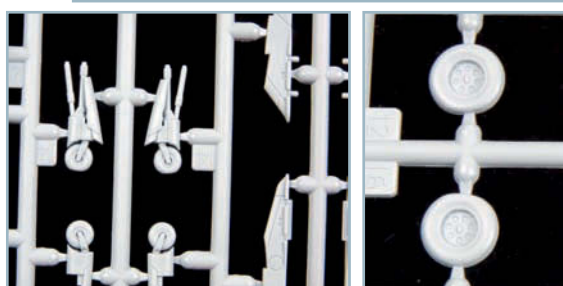
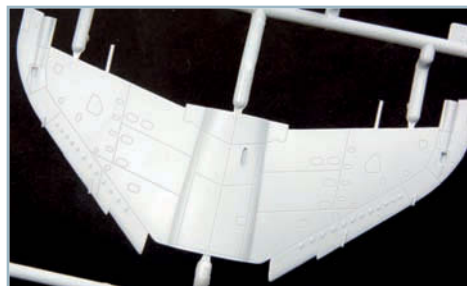
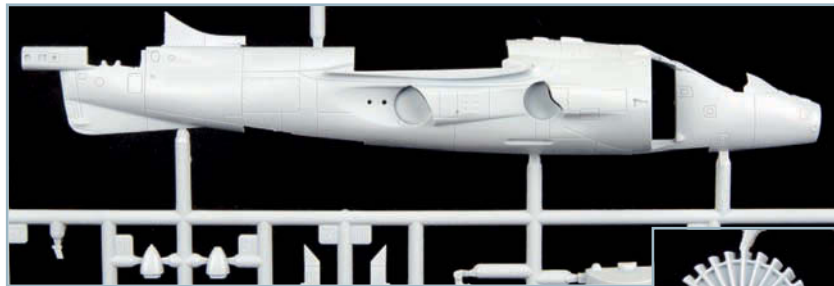
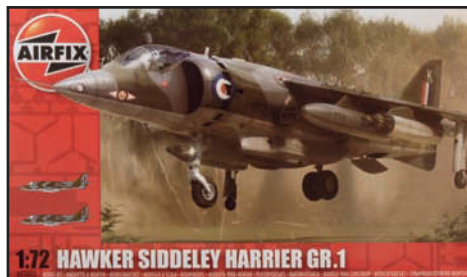
but shouldn't take much work to smooth-out should you wish. The star of the show is the Cartograf decal sheet with no less than seven schemes ranging from the mid-1930s through the Spanish Civil War to early WWII with some very testing camo patterns, I really think the way my eyesight is these days I'd have to be looking at this Italian stallion in 1:48! If you can't wait to see if AZ Models release a new tooling of the CR.32 in small scale this release is worth looking out for if even for the decals alone.



Revell 1:32 Messerschmitt Bf 109G-6 Late & Early version

The eagerly anticipated brand new large scale Messerschmitt from Revell has just landed here and we are pleased to report that it looks like a real winner. Revell obviously have an eye on future variants too judging by the design of the parts and the sprues and few will complain that this kit provides a choice of parts for either early or late versions of the G-6. The fuselage has been designed for alternate cowlings and the decision to provide the taller rudder by cutting the vertical stabilizer rather than slicing off the whole tail as in Hasegawa's clumsy solution is genius. So, what's in the box? Well to start with there are some greatly improved instructions with much cleaner, less 'shouty' drawings that have already lowered my pulse. The cockpit looks very good straight from the box with choice of cannon covers and excellent detail on the instrument panel. The only gripe here are the moulded on seatbelts which will be tricky to remove from the depths of the bucket seat. The fuel line on the cockpit sidewall is moulded in clear plastic as is the gunsight. I am pleased to see a main spar has been provided to locate under the cockpit as this should help to align the wings. Happily there is no attempt to provide an engine as this is always better left to the resin boys but the separate cowls are provided with an underlying support frame and the distinctive MG bulges are also separate. The absence of the 'trop' supercharger filter is

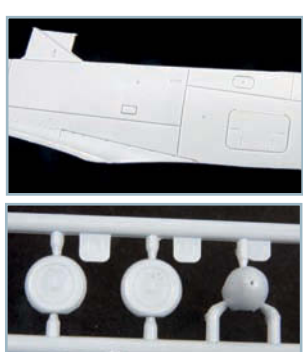
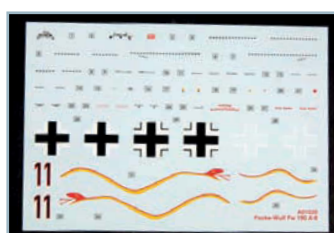
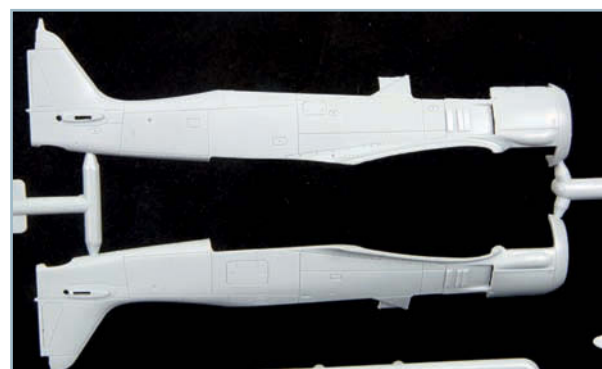
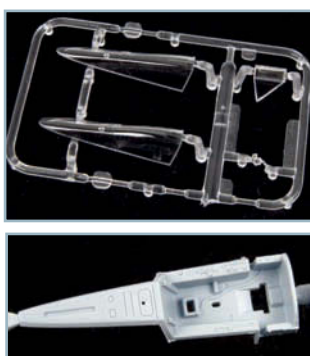
disappointing but easily fixed with an aftermarket part. Similarly there are no underlying cannon pods supplied. The upper wings are moulded in two sections no doubt to allow for the highly detailed wheel wells and all the control surfaces are separate as we would expect. The taller late tail option simply plugs onto the root of the tail as we discussed and the kit comes with a choice of excellent wheels with treaded or smooth tires and separate hubs. The clear sprue provides two styles of windscreen and two styles of canopy which can be modelled open or closed. The propeller has separately moulded blades with the roots of the blades suffering from some sink marks on our sample. Two sets of marking are provided, one early and one late and the well printed decal sheet produced in conjunction with AirDOC also provides the instrument panel dials but as anticipated no hakenkreuz. Overall a great looking kit with well defined yet subtle surface detail which looks like being recognised as the new definitive Bf 109 G-6 in this scale. Given that this is also offered at Revell's extremely reasonable price point of around £20.00 and you have a winning choice! Highly recommended. Revell model kits are available from all good toy and model retailers. For further information visit www.revell.eu or email ukbranch@revell.de



Airfix 1:72 Hawker Siddeley Harrier GR.1

Surely there's nobody better than Airfix to produce a newly tooled Harrier? with a GR.3 already promised late in the year this is all good news for modellers of this legend of an aircraft. The sprues are indeed all fresh in the nice matt pale blue-grey preferred of late and the detail and quality are as you'd expect from state of the art tooling. With around one hundred parts construction should be simple enough and there looks to be no surprises regarding the kit's design starting with a good looking multi-part cockpit (including the obligatory pilot) and optional parts provided

for the cowl doors to show 'in-flight' or stationary (engine off). Panel lines have been kept nice and fine and there looks like nothing in the way of clean-up of the parts other than the sprue runner points. The Cartograf decal sheet is very detailed and of the highest quality with markings for two British GR.1s No.1(F) Squadron RAF Wittering, England, September 1970 and No.20(R) Squadron RAF Wildenrath, Germany, June 1971. Another affordable quality release from Airfix



Airfix 1:72 Focke-Wulf Fw190A-8

More small scale from Airfix with a new approach to an old-school style kit with this Fw190A-8. The small end-opening box contains three small sprues in the pleasant grey styrene with fine detail and crisp moulding immediately apparent. Something I noticed was a reduction in the size of the attachment points on the sprues which is welcome. The cockpit tub shows raised instrument detail and a well rendered seat, thankfully without moulded-on seatbelts. Facia detail is offered as a decal and the moulding of the clear canopies

is very nice allowing a good view of the cockpit. Fuselage detail is nice and fine including open exhaust cowls and a basic engine to plug in. Excellent detail extends to the wing surfaces and the option of raised or lowered landing gear is offered. One option of markings comes on the Cartograf sheet of Jagdgruppe 10, Germany 1944, no tail markings are present. More great value modelling for all.

A great collection here for RAF and RCAF modellers with these five sets from Canadian manufacturer Sky Grid. A summary of the sets is AOD32009m RCAF Fighter Recce Spitfires in 1:32, AOD48011 more RCAF Mosquitoes in 1:48, AOD72007.1 Early Hurricanes part 1 in 1:72, AOD482007.2 Early Hurricanes part 2 in 1:48 and AOD48002m RCAF Beaufighters 404 Squadron. A couple of the sets have been available previously but the new releases have been updated and expanded. First and foremost is the decal quality which is first rate, sharp register, solid colours

and even the smallest of stencilling perfectly legible. Even more impressive is the information provided on the folded A4 sheets, the quality of the presentation, the graphics, the illustrations and detailed information would make a nice small format softback book of maybe a dozen pages! Perhaps this is cost prohibitive and information is provided of how to obtain a pdf file of the coloured artwork to your email address. Very impressive sets indeed. www.aviaeology.com

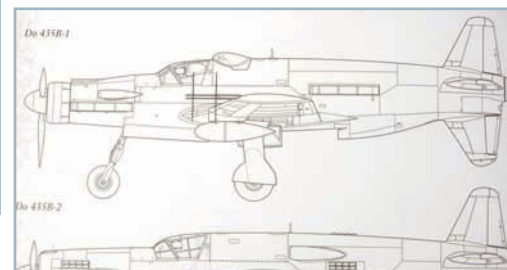


By Tomasz J. Kopanski
A4 Softback format, 88 pages
ISBN 978-83-63678-09-8
www.mmpbooks.biz

The next volume in MMP's Polish Wings series covers the most famous Polish bomber family the PZL.23 Karas (Crow) which was in service at the outbreak of WWII. If you have plans for the tasty Mirage 1:48 kit, or even the vintage Heller 1:72 offering this book will be a great inspiration to get you started. MMP's visual modelling reference follows the usual format with superb colour profiles and largely unpublished period black and white photographs. Along with Polish markings there's Romanian,



Bulgarian and captured German schemes. Along with the PZL.23 the PZL.42/PZL.43 and the PZL.46 'Sum' are covered. The high quality and detail of the colour profiles offer excellent reference of weathering with the illustrations posed alongside the photographs of the actual aircraft. If you're already collecting this series, volume 17 won't disappoint at all. More great, affordable modelling reference from MMP who are never afraid to explore niche subjects.



German Air Projects 1935-1945, Fighters

By Marek Rys

A4 hardback format, 176 pages

ISBN 978-83-61421-76-4

www.mmpbooks.biz

The subject of 'What If' Luftwaffe aircraft seems to gather popularity, and another book in MMP's series 'German Air Projects' highlights the fighters that might have been. This book is in fact an amalgamation of two previous volumes (I and II) with updated information and images. In common with other MMP volumes on the subject there is a wealth of quality illustrations and background information along with line drawings. A few period photographs of factory prototypes give a little credibility to

Germany's plans to dominate the air with some very creative engineering with most of the designs appearing highly plausible. The chapters are split by manufacturers featuring amongst others, Arado, BMW, Dornier, Heinkel and Messerschmitt. I'm sure Luftwaffe enthusiasts will find the information and illustrations interesting and the book has a nice feel to it being a large format hardback.



Hungarian Fighter Colours 1930-1945 Vol.1

By Dénes Bernád and György Punka

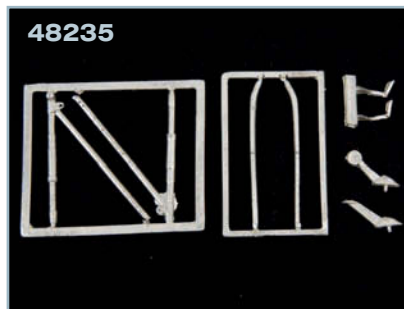
A4 Hardback format, 188 pages

ISBN 978-83-61421-731-9

www.mmpbooks.biz

If you're interested in wartime Hungarian aircraft prepare for a visual feast! The first volume on the subject of Hungarian fighters is absolutely packed with great period photographs (with a large number in original colour) beautiful colour profile illustrations and plenty of informative reading covering generic markings and colours from the very beginning in 1919 with period technical drawings and photographs of preserved parts providing sound reference for modelling. Italian and German aircraft in service covered in this first volume are Fokker D.XVI, FIAT CR.20, CR.20B, AVIS I-IV, FIAT CR.30, CR.30B, FIAT CR.32, CR.32bis, FIAT

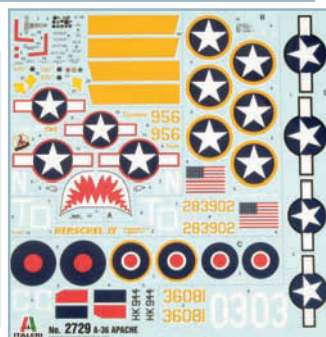
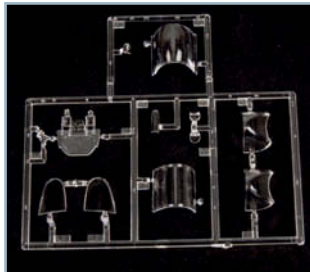
CR.42, CR.42CN, Messerschmitt Bf 109D-1, Messerschmitt Bf 109E-3, E-4, E-7 and Messerschmitt Bf 109F-2, F-4- there really are some great schemes to get you thinking. A fully detailed appendices logs aircraft type, numbers etc and their organisation during major fighting. It's obvious a massive amount of research has gone into this labour of love on the authors part, coupled with Volume II when released I'd imagine you'd have all the reference you would need for modelling a Hungarian project. An excellent book worth getting hold of for the photographs alone!



Scale Aircraft Conversions

SAC's range of replacement metal landing gear continues to expand starting with 1:72 72064 designed to replace the landing gear on the Airfix Vampire and 72065 is a set to fit Cyber Hobby's Sea Venom- both these releases contain 2 sets of gear. Also in 1:72 is 72066 for Academy's F/A-18A-D.

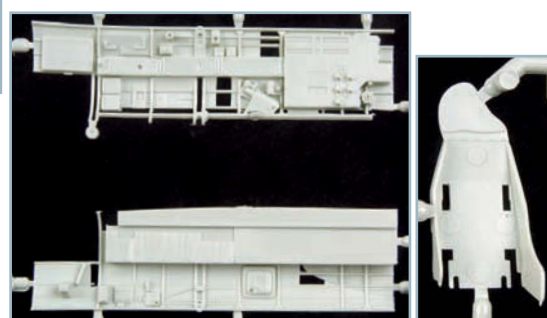
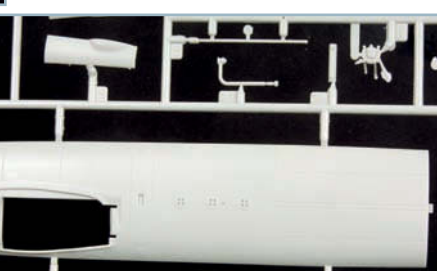
In 1:48 new releases are 48233 for Kitty Hawk's Jas-39 A/C, 48234 is designed for Italeri's A-10 and finally 48235 an upgrade for Eduard's I-16 Type 24/29. There's a huge range available to view at www.scaleaircraftconversions.com



Italeri 1:48 A-36 Apache

The sleek Mustang predecessor would have been a bit of a surprise release from Italeri as an 'all new' kit and the usual 'Super Decals' flash on the box artwork hints that this may well be a re-box, which indeed it is. The good news is that it's the well respected Accurate Miniatures kit which seemed to disappear for a while, it's original release was in the mid nineties- hard to believe! A fresh look at this kit leaves a good impression; nice detail, simple assembly and the great decal sheet with four inspiring colour schemes (three USAAC and one RAF) there's little to grumble about. Moulding quality is clean and sharp showing no signs of the kit's vintage although one gripe is the quality of the

canopy clear moulding, a little thick without an option to display open- some modellers may look to the available aftermarket parts, the nose mounted .50 Cals would also look superb replaced with brass versions. The surface detail across the airframe is excellent with a delicate 'in scale' appearance. A quick look over the 1:48 plans in a recent MMP publication proves a good match of all the major shapes. A very nice and worthy re-release, even if you have the original kit hidden away it's worth picking one up for the decals. Our thanks as always to The Hobby Company for our Italeri samples.



Ju87 B-2 Stuka

1./St.G3, North Africa, 1942

CHARLES WHALL

ADDS SOME PERSONAL TOUCHES
TO ITALERI'S KIT

Italeri's latest Ju87 Stuka makes a refreshing change from the older Hasegawa offering which, until now, was the only decent kit in this scale. The Italeri offering is a completely new tool with sharp details, crisp panel lines and a number of other refinements over Hasegawa's (which is still an excellent kit however). Four different markings schemes are available, based within in the European Theatre of Operations with the usual splinter scheme camo. Having built my first Stuka from the Battle of Britain period, I wanted to find a scheme that was different from 'the norm' and I certainly found what I was looking for with this tropical scheme I came across from an old modelling manual.





ITALERI **1:48**

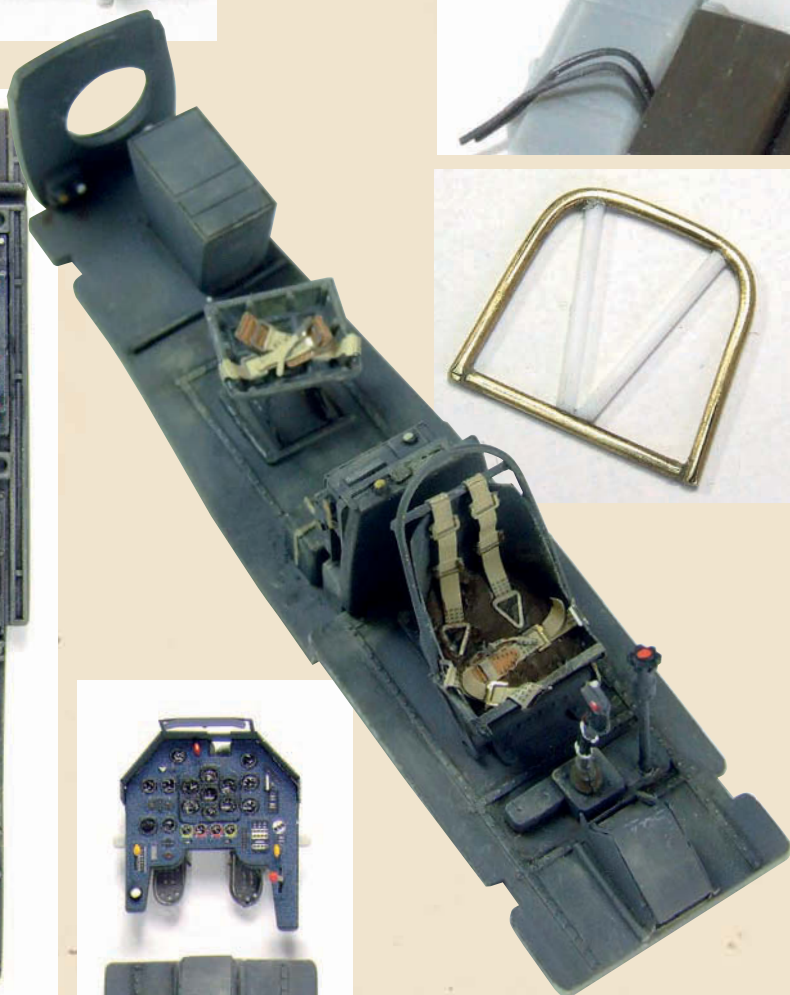
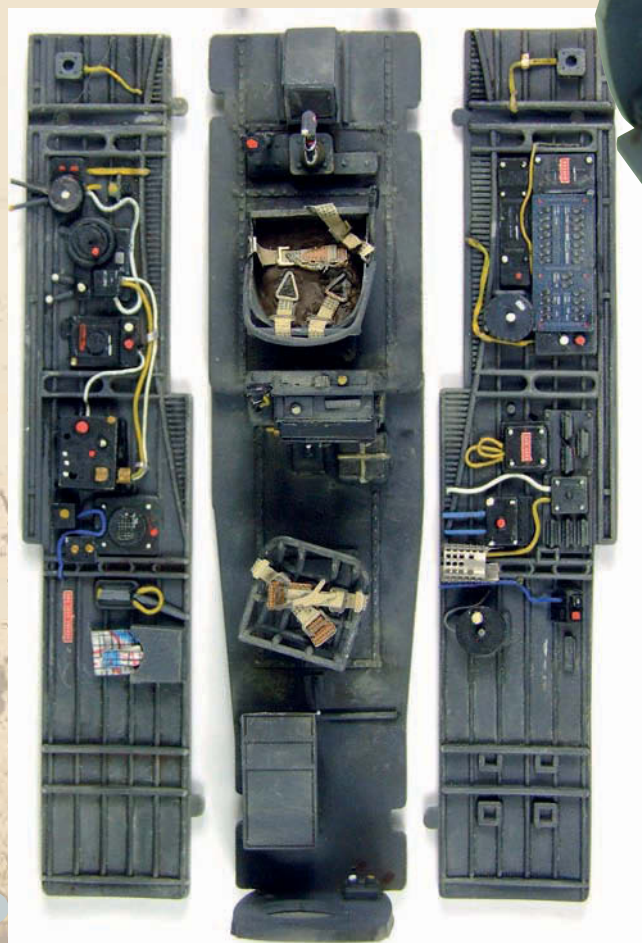
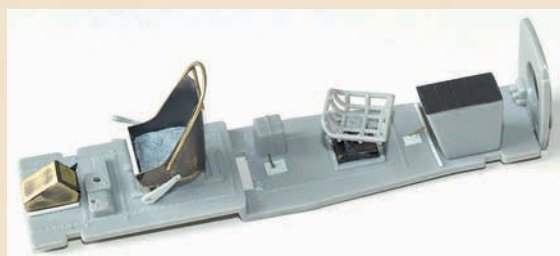
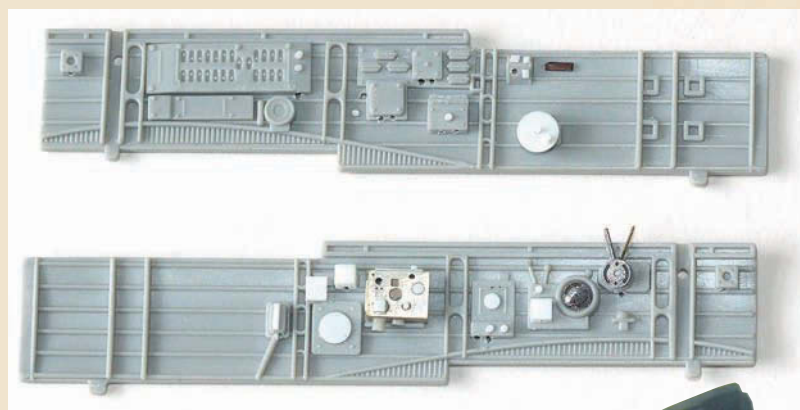
INTERIOR CONSTRUCTION

I have never built a kit straight from the box as there are always loads of great aftermarket sets available these days. This kit being no exception, it is an ideal starting point for additional detailing so as usual I went to town with adding a number of parts, and some scratch-built parts too. A Jumo engine set is available if the modeller wishes to show a stripped down Stuka and this area is nicely detailed, complete with firewall, engine bearers and other plumbing, but is screaming out for some super-detailing....maybe next time!

The kit does offer a small PE set for the instrument panel, seatbelts and wing walkways, but the cockpit itself is very basic so I went to work adding a number of etched and styrene parts. Gunner and radio compartment details were added and the framework behind the pilot's seat was re-worked using brass rod to create a more accurate construction and fitted into the canopy. A coat of RLM66 blended everything together

with the lead wiring from Plus Model picked out with acrylic colours and other small features like the map-box, maps and PE instrument panel enhanced an otherwise fairly dull grey cockpit.

The kit seat is an odd shape so I raided the spares box for an old PE seat which was enhanced using brass wire for the framework. Once the cockpit was finished, thin strips of styrene rod were used for the canopy rails. 0.2mm wiring was added to the radio and gunner compartment. I added a leather cushion for the pilot's seat made from Blue-Tak and used Eduard photoetch seatbelts. The cockpit went together ok but having glued the sidewalls to the fuselage, a fairly wide gap was apparent along the length of the cockpit sills where the sidewall did not follow the contour of the fuselage and needs some careful manipulation to get it to marry-up.

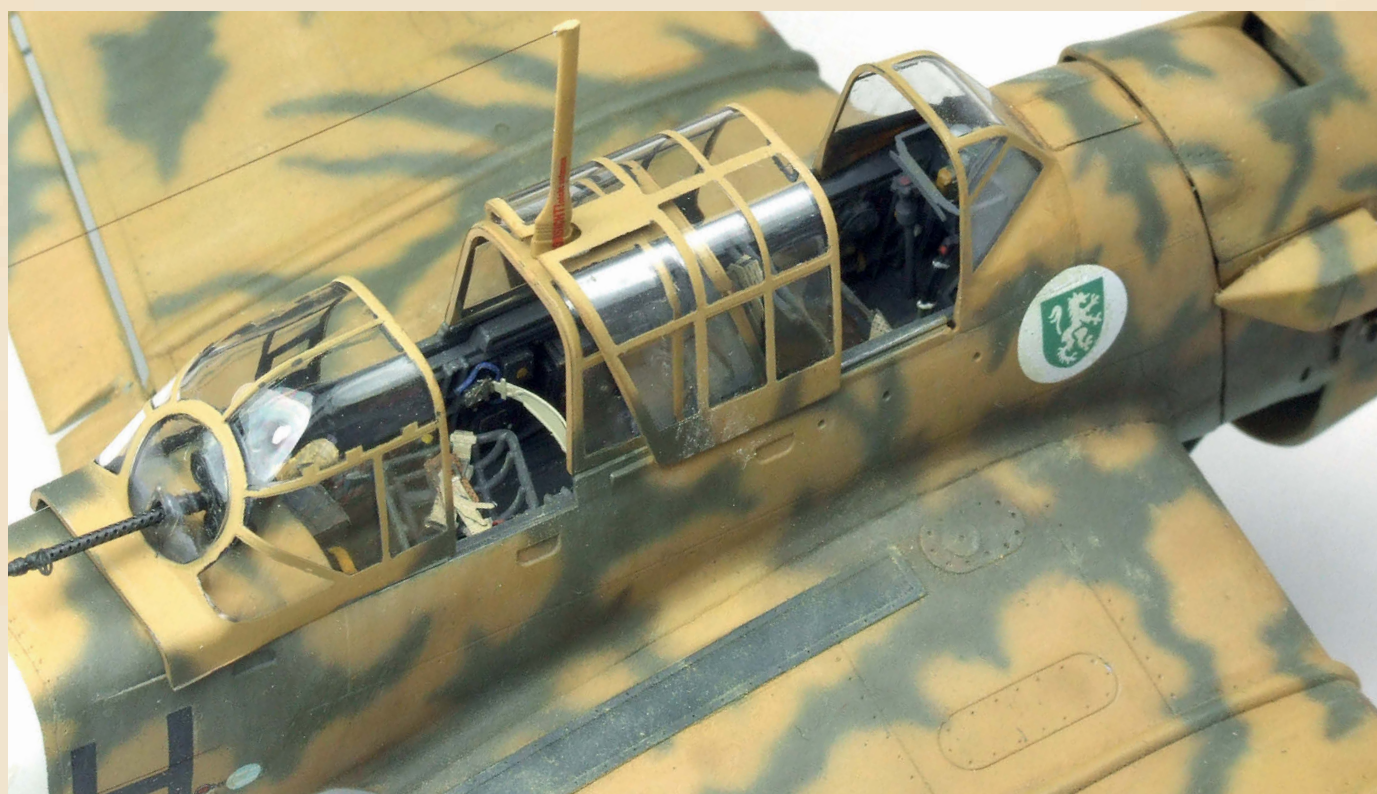


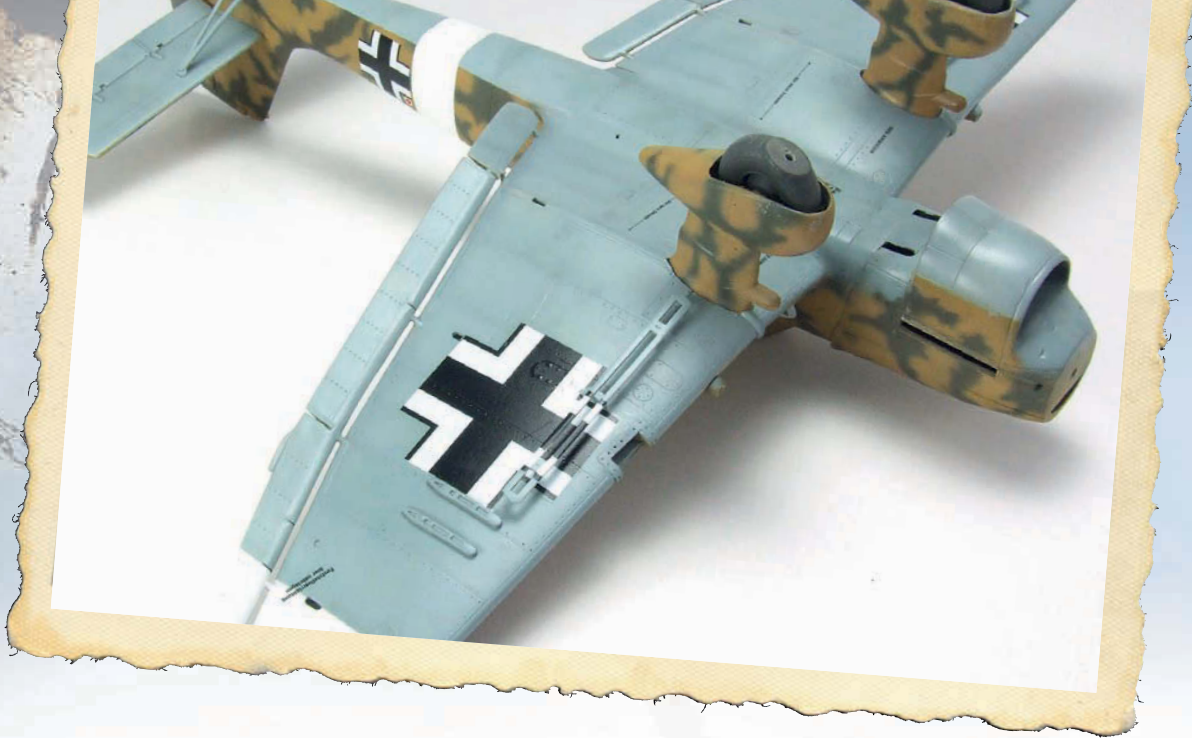
EXTERIOR

As I was making a tropical B-2 I had to use a Hasegawa air intake kit part as Italeri do not provide an alternative. The clear canopy parts are well scaled and were given a coat of Future then masked using an Eduard set. The front canopy does not fit well and a noticeable 'step' between the canopy and the fuselage sides were immediately apparent, but a small amount of green putty filled the gap nicely and was sanded level. The famous gull-wing section aligned perfectly at the fuselage roots and only a very small amount of liquid cement was used here. A nice addition on the PE set mentioned earlier, are counter-balances for the elevators. Italeri have been thoughtful here and provided the modeller with an option to drop the elevators which have been

provided as separate parts to the rear stabilisers.

A significant area of the Stuka's wing is taken up by the flaps and ailerons and while Italeri have provided a separate set of much neater actuator details over the plastic triangles that attach those parts to the wings on the Hasegawa kit, I chose scratch-build the flap actuators from styrene and piano wire for a more accurate representation - quite time consuming but worth it in the end. The kit bomb support mechanism was enhanced using some brass wire to represent actuator rods and left in the dropped position ready for 'bombing up'.





"really tested my
airbrushing capability to
the point of actually
giving up the whole
project!"



PAINTING AND MARKINGS- A LESSON IN PERSEVERANCE!

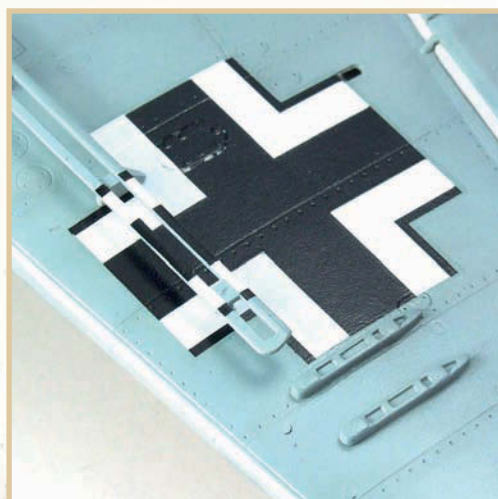
Not one to shirk a challenge, the tropical camouflage scheme really makes this Stuka stand out but is incredibly time consuming and really tested my airbrushing capability to the point of actually giving up the whole project! Following a number of mistakes which I had to keep correcting- the smallest deviation with the airbrush would create a glaring error! But I knew what I wanted to achieve and stuck with it, which proved worthwhile as I was very pleased with the end result and have learnt something new about fine airbrush work, which is what modelling is all about in my opinion!!

The paints scheme is RLM 79 (Light Blue) (RLM 79 (Sand Yellow), RLM 80 (Olive Green), the fuselage band and underside

wing bands were RLM 21 (White). All painting was carried out with various acrylics (Tamiya, Gunze, PollyScale and Aircraft Colours) and applied using my trusty Iwata HP-B airbrush with 0.2mm nozzle. The base colour for the green was applied at a pressure of 20psi, to create the fine edge to the pattern and various lighter shades colour was built up in 'filters' providing more depth to the colour. After a flat coat to seal everything, I used the oil-dot filter technique to create weathering streaks over the top of the completed scheme. A small amount of post shading was carried out to enhance various areas with some highly thinned black-brown Tamiya paint. General weathering to the wings and walkway areas was done with a wash of black/brown oils and a dusting of

Tamiya and MIG pigments. General scuffing was done using Prismacolor silver and HB pencils.

The Super Scale International decals I needed for the markings are currently out of print and after a great deal of searching, the set was provided by a very kind member of the Hyperscale community. Apparently, the decals were old which did not bode well as I expected them to crack up in warm water. So I only had one shot with them but thankfully they went down beautifully with a minimal amount of Microset/sol and sealed with a flat coat of Vallejo matt varnish mixed with a little satin.







"overall I found the kit very easy to manage"

SETTING THE SCENE

The base was made from Jelutong (soft wood) with a simple molding routed around the edge. A layer of cork matting provides a great base onto which I added very fine sand (collected from Taqali airfield in Malta!) using white glue. I used the wonderfully detailed Verlinden starter trolley and added ladders from Eduard PE sets which are rather pricey but do make a nice addition. Oil drums and empty boxes were added for additional interest.

Aftermarket additions

Eduard photoetch parts
Gunze/Aircraft Colours/Tamiya acrylics
Quickboost Pitot tube, wing mounted machine gun barrels, magazine drums and corrected prop/spinner
Moskit copper exhausts
Master brass MG17 barrel
Verlinden & Hasegawa Luftwaffe airfield sets

References

Classic Colours, Luftwaffe Colours, Stuka volume 1,
Luftwaffe Ju87 Dive-bomber units 1939-1941, Peter C Smith
Applied modelling encyclopaedia, Squadron Signal Publications



WAS IT WORTH IT?

In a nutshell, yes. Overall, I found the kit very easy to manage but with a few minor fit issues. Great for beginners or seasoned veterans alike and provides a great base for lots of extra detailing. I have already started working on the D-5 version next but with a much less mentally demanding Eastern Front splinter scheme!

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